Model Engineer

DECEMBER 1974

MAP HOBBY MAGAZINE

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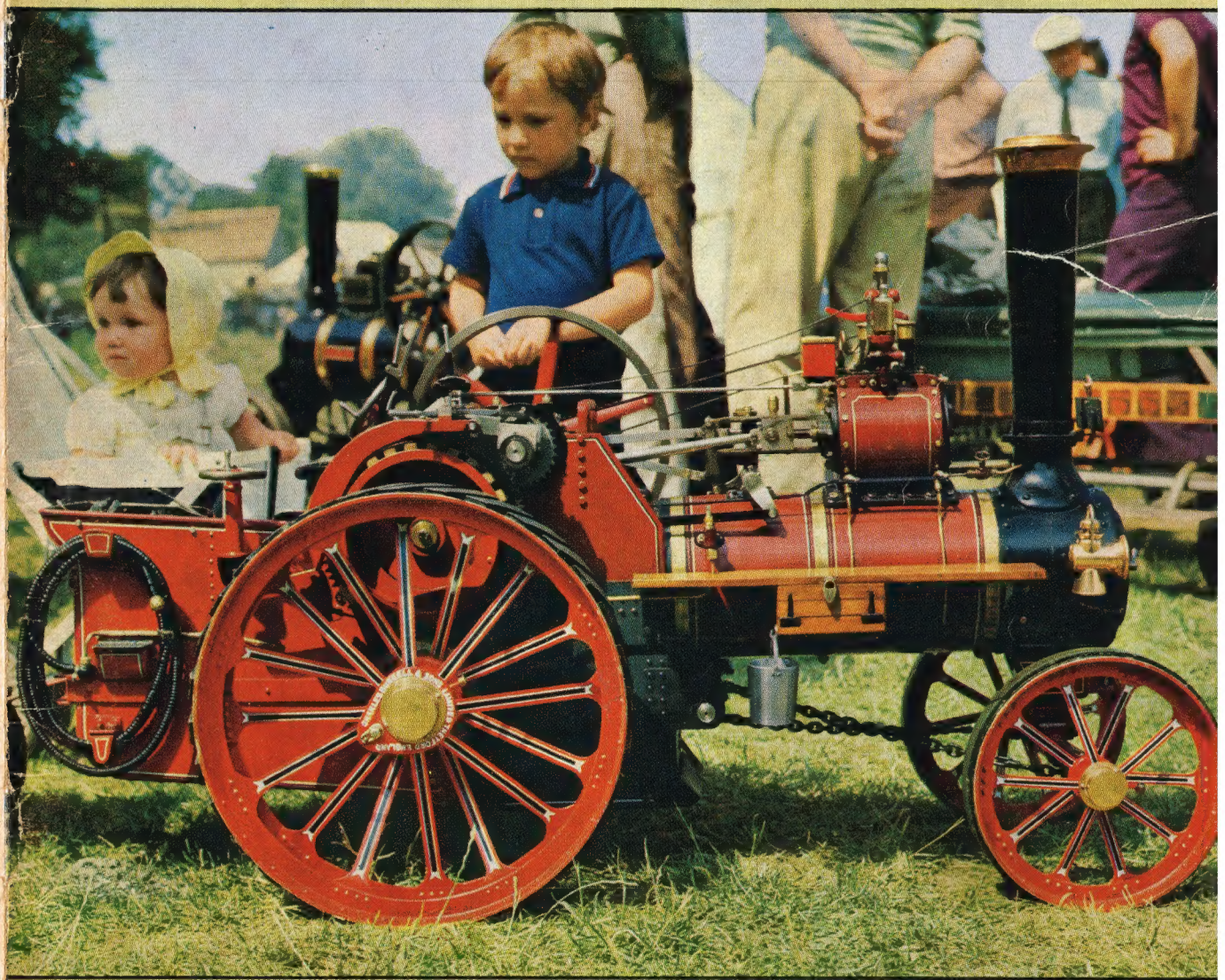

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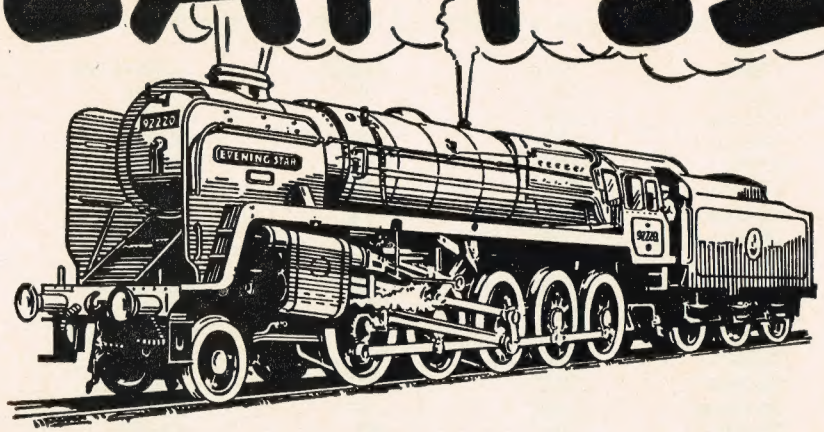

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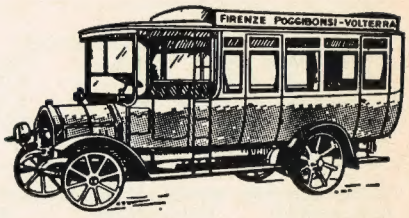

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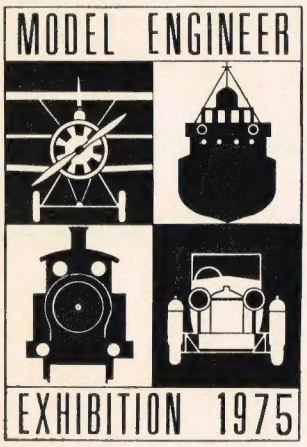

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On the cover . . .
A fine 4 inch scale Burrell agricultural traction engine owned by Mr. D. R. Ketley of Chelmsford and photographed at the 1973 Sudbury Mammoth Old Tyme Rally by Mr. J. K. Ellwood of Skipton-in-Craven.

MAP
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31st December 1974 — 11th January 1975

(Not Sunday)

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NEVER A DULL MOMENT . . .

One of our greatest joys is the discovery of model making enthusiasm in the most out-of-the-way and even way-out places. There was the taxidriver who seeing the Exhibition badge on a lapel confessed to making violins as his hobby, sought professional advice, and, true to his word came back to the show when his driving spell was over, not once but on several evenings . . . There was the Greek fisherman encountered on a cruise who made model windmills — all based on the curious style seen on Rhodes and was thrilled to learn of other shapes and kinds . . . and many other casual meetings with people on trains and in buses who used their hands skilfully to make something which pleased them.

Many of our visitors will be uncommitted people who drop in, who bring or are brought by friends, give their nephews an outing or come along for some reason quite unconnected with the subject of models. We hope they will duly be fired with an urge to make something — and it does not matter how their efforts turn out, perhaps a triumphant first effort and never to look back, perhaps a long struggle to produce some thing even vaguely like the prototype, or more likely, an achievement somewhere between those extremes. We do welcome them most heartily to our band: in times when business worries may press hard upon so many of us there is a real escape to be found in the workshop, even if it is a mere corner of the kitchen table. Some find their relief digging in the garden, but more and more are appreciating the very special joys of making something.

Here in our exhibition they will see the cream of the year's models as their yardstick, and will have opportunities to meet and talk with experts in all branches of our hobbies. Do use those opportunities — people will be delighted to tell you all about it, either on our trade stands where you can handle and buy model goods of all sorts, or, better still, speak to the experts on the S.M.E.E. workshop stand, or to our own magazine editors who will certainly be in evidence.

How does this annual festival of modelmaking come into being? As we have said so often before, we are merely the ringmasters who usher in the performers . . . we are duly grateful to the magnificent efforts put in first by the model societies and finally by model engineers all over the country who, year by year, provide such infinite variations on the theme of the mixture as before! We must always give special mention to the Society of Model and Experimental Engineers who have grown up alongside the magazine and provide not only a regular members' display of working models, man their own S.M.E.E. Workshop feature, but also provide and operate under the capable control of "Bill" Carter their famous live steam team of passenger-hauling locomotives. We should also thank those other

(Continued on page 11).

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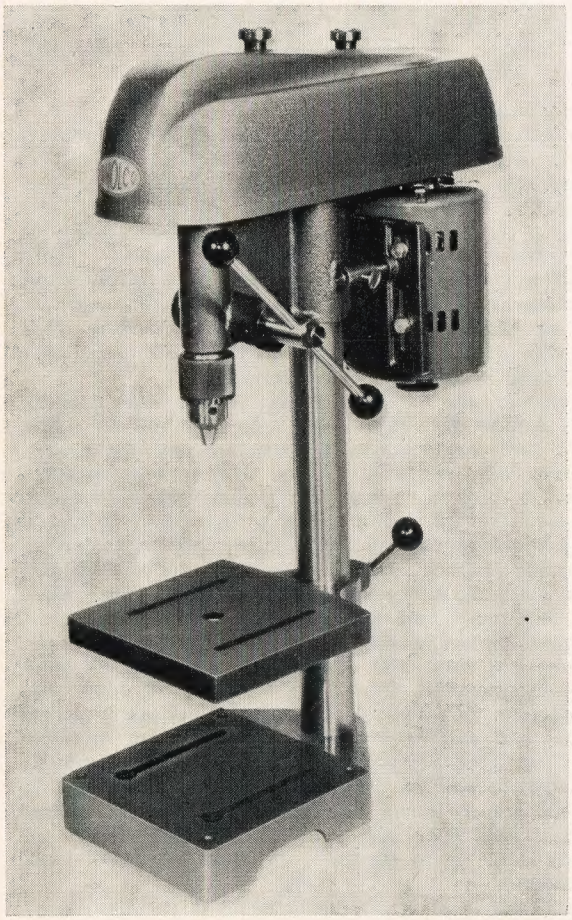

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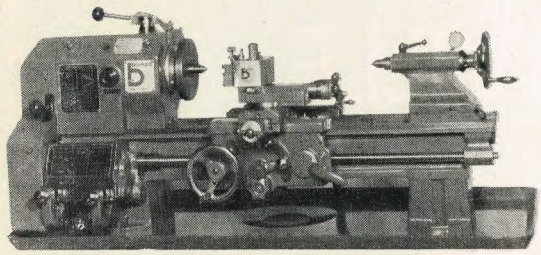

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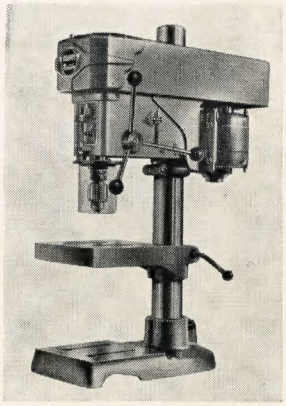

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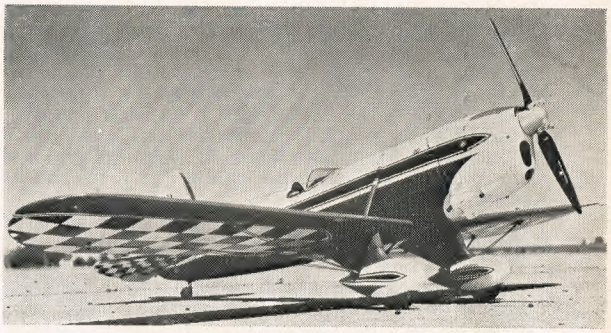

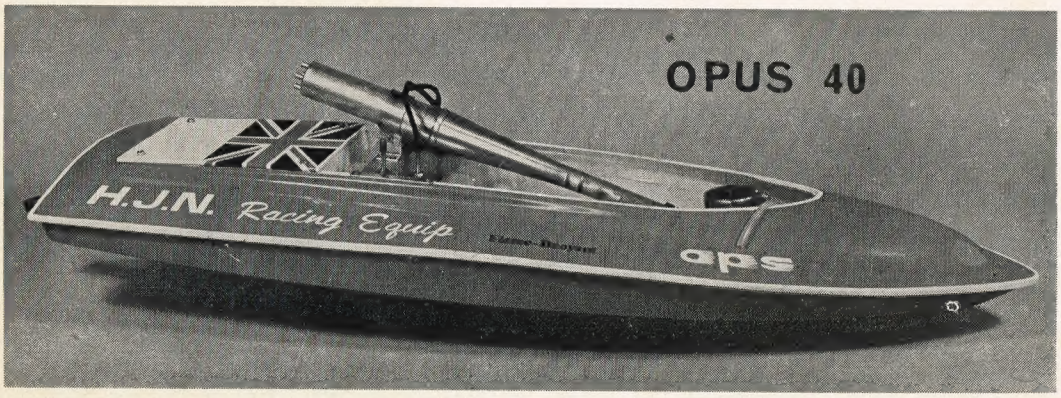

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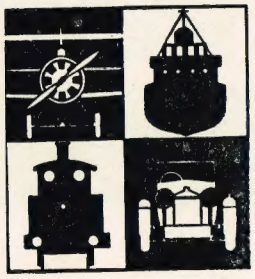


What you will be seeing at the Model Engineer Exhibition

VISITORS to our exhibition undoubtedly come, in the first instance, to see the models on display and we are fortunate in having something new to attract them every year. Whilst every stately home has its own miniature railway it is a new thing for schools to offer a passenger hauling steam transport system as part of their curriculum. However, Headmaster Brian Nicholson of Waterhouses Secondary School, Stoke-on-Trent, has started the ball rolling with his Leek and Manifold Light Railway locomotive which, at 10¼ in. gauge, is a one-third full-size Narrow Gauge locomotive. Messrs. Coleby-Simkins Engineering of Melton Mowbray, who played so large a part in the American Berwick locomotive several years ago are responsible for this splendid 'little giant'.

Again in the field of novelty we are happy to introduce the Tucktonia project in which readers are invited to participate in 'Building Britain in Miniature' on a 3¾ acre site on the South Coast.

This year we have made one or two changes in presentation to enable more models to be displayed and more trade stands to be available. Most notable is the siting of Military Models and War-gaming on the balcony, which is approached by stairs leading out of the Main Entrance Hall. This will provide better display facilities and a larger and more public area for war-gaming.

FLYING CIRCLE

Again our good club friends will be rallying round to provide something new in electric powered model flying. As in the past clubs at Grantham, Luton and Cambridge will be displaying their skills and this year we also expect to have new club units, including the West Country.

Any individual or club who would like to perform please get in touch with our Mr. Peter Richardson at Hemel Hempstead (0442 2501) for details of line attachments.

BOATING MARINA

Our boating pool attracts more and more interest each year and with World Championships in this country in 1975 we can expect to enjoy a foretaste of good things that will be in competition with our visitors later in the season.

Trade demonstrations will also be arranged and again we would invite clubs and individuals who have not, as yet, made arrangements to bring their boats to get in touch with Mr. Vic Smeed, (telephone 0442 2501).

The Model Power Boat Association will be arranging club activities, each evening, but we can still offer a number of excellent performing times during the day.

DIORAMAS

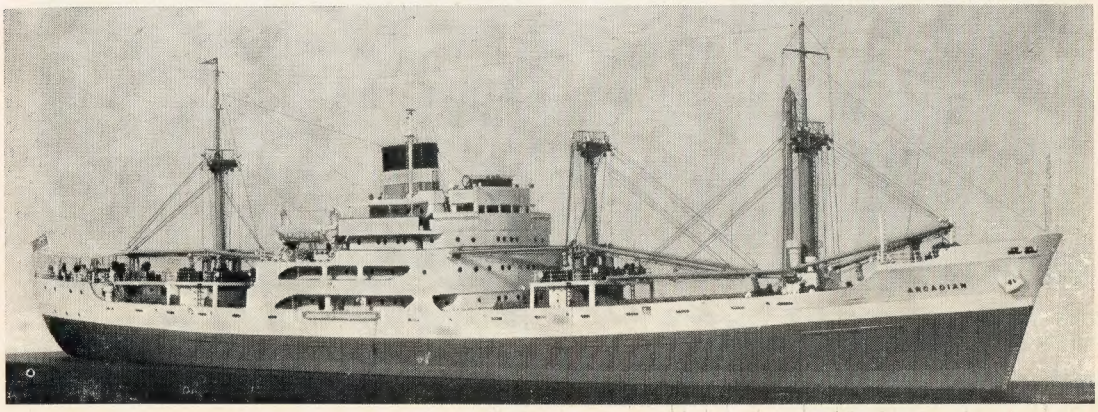
Restrictions on lighting last year somewhat dulled the splendour of Diorama entries but this year we are hoping to have a glowing display which will be mainly on the first floor balcony and in the adjacent gallery. In particular our new rule requiring larger scenic representations to be enclosed in cases should ensure adequate protection from dust and tiny fingers during the exhibition.

Smaller entries will, of course, be under glass.

LIVE STEAM LOCOMOTIVES

Our good friend "Bill" Carter will be, as ever, in charge of the Society of Model and Experimental Engineers passenger-hauling track with a sparkling squadron of locomotives on duty. These will be added to from time to time by the trials under steam of the L.B.S.C. Memorial entries under Chief Judge Laurie Lawrence.

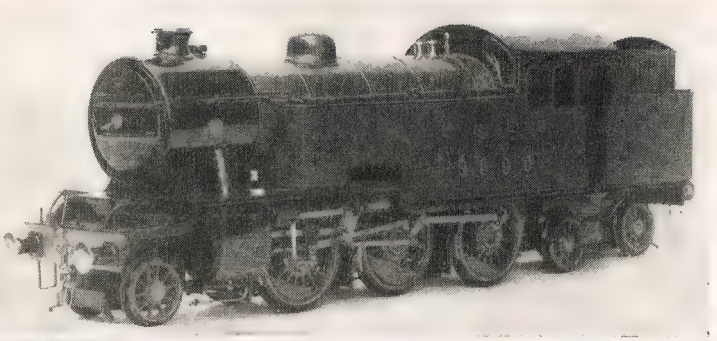
Adjoining the passenger track will be the immensely successful S.M.E.E. Model Engineer

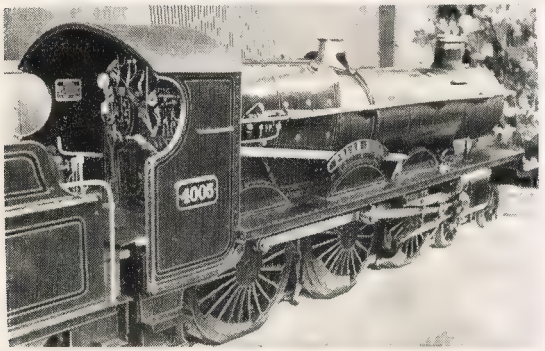


Opposite page :
S. R. C. Walmsley's magnificent model of MV Arcadian constructed from ship-builders' drawings.

On the right :
Splendid example of 3½in gauge locomotive — LNER Class L/1 by J. C. Bye of Ipswich M.E.S.

Below :
All castings (except wheels) by builder who also made the copper boiler of this GWR Star. Fine effort by 71 year old model engineer S. W. Baker. (Photo Courtesy of Ringwood Journal).





Workshop where visitors can see modern processes in operation and can ask difficult questions of the expert team in attendance.

CLUB EXHIBITS

S.M.E.E. complete their trio of features with their working model display increased in size last year for the 75th anniversary show and held at that larger size this year to give adequate display to their numerous moving exhibits. This year we have brought two other of our supporting clubs into the Main Hall, the North London Society of Model Engineers and Southern Federation of Model Clubs and these clubs are showing their paces in the spacious stands under the gallery; as are the British Model Soldier Society who have come in closer to their main trade exhibitors.

DEMONSTRATIONS

Clubs and some Traders will be providing demonstrations of modelling processes and model engineering. Our own new magazine GEM CRAFT will also be hosts to demonstrations of enamelling and other gem craft activities. Our old friend the Bottle Chopper will be showing his skill and we shall also be offering "Geode cracking".

SHIP MODELS

Many of our Model Ship entries are being displayed to advantage in the Bryanston Room. The Model Power Boat Association Stand is also in that hall.

BOYS' EXHIBITION

Commander Guffick's Boys' Exhibition display will, as usual, occupy one of the galleries. Their entries are made up, in the main, of first efforts by youngsters and serve as a great encouragement to others to try their skills.

COMMISSIONAIRES

Please help by falling in with requests that may be made in the matter of crowd marshalling. If possible mid-week visits are recommended and pre-ordering of tickets which saves any need to queue at the cash desk.

NEVER A DULL MOMENT *Continued from page 5*

model engineering groups the Southern Federation of Model Clubs and the North London Society of Model Engineers who provide attractive displays and a great deal of expert assistance.

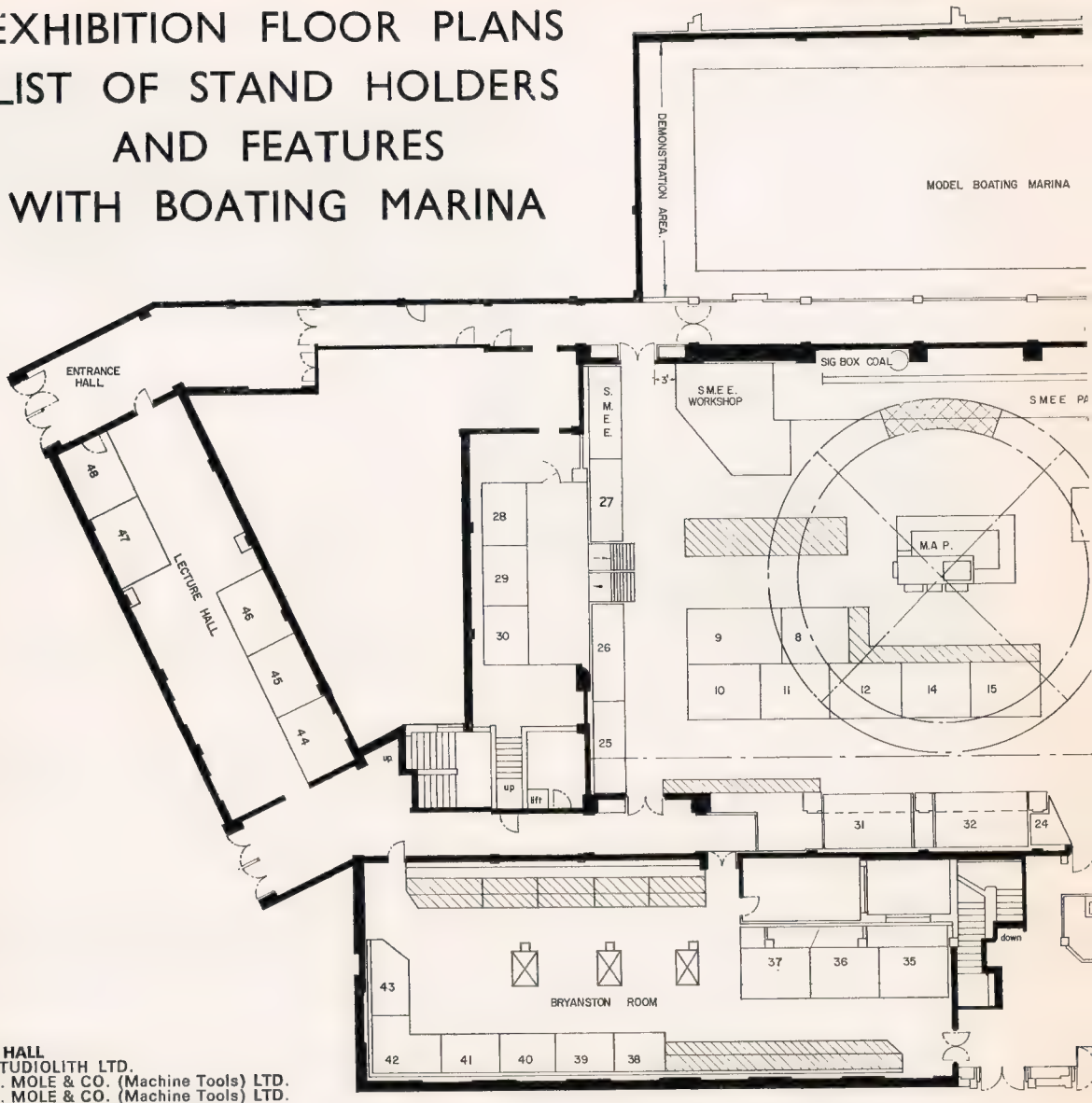
With the ever-widening circle of model interests we are appreciative of the work put in by Society of Model Aeronautical Engineers' clubs in manning our regular electric aircraft pylons and doing so much to get new and different models into the air — each year producing some further skilful advance in technique. Meanwhile Model Power Boat Association members have been rallying to operate our boating marina with demonstrations and contests.

Of recent years the amazing expansion of Military Modelling has demanded a growing share of precious hall space. This year model soldier displays and wargaming operations will be occupying the whole of the balcony area giving them a more prominent place in the scheme of things.

On the crafts side our Woodworker magazine is steadily increasing its hold on the enterprising enthusiast desirous of producing his (or her!) own-design furniture; whilst our latest crafts "baby" Gem Craft for the first time offers the distaff side an opportunity to play on level terms with the hitherto triumphant male.

Nor must we forget to thank the model trade for their ever welcome support. By coming to our show they give so many out-of-town visitors an opportunity of seeing handling and buying goods that otherwise come no nearer than an occasional advertisement. Some of our good trade friends make a special effort to stock up and even hoard goods in short supply so that they can provide a well-stocked counter on these occasions . . . Thank you one and all!

EXHIBITION FLOOR PLANS LIST OF STAND HOLDERS AND FEATURES WITH BOATING MARINA



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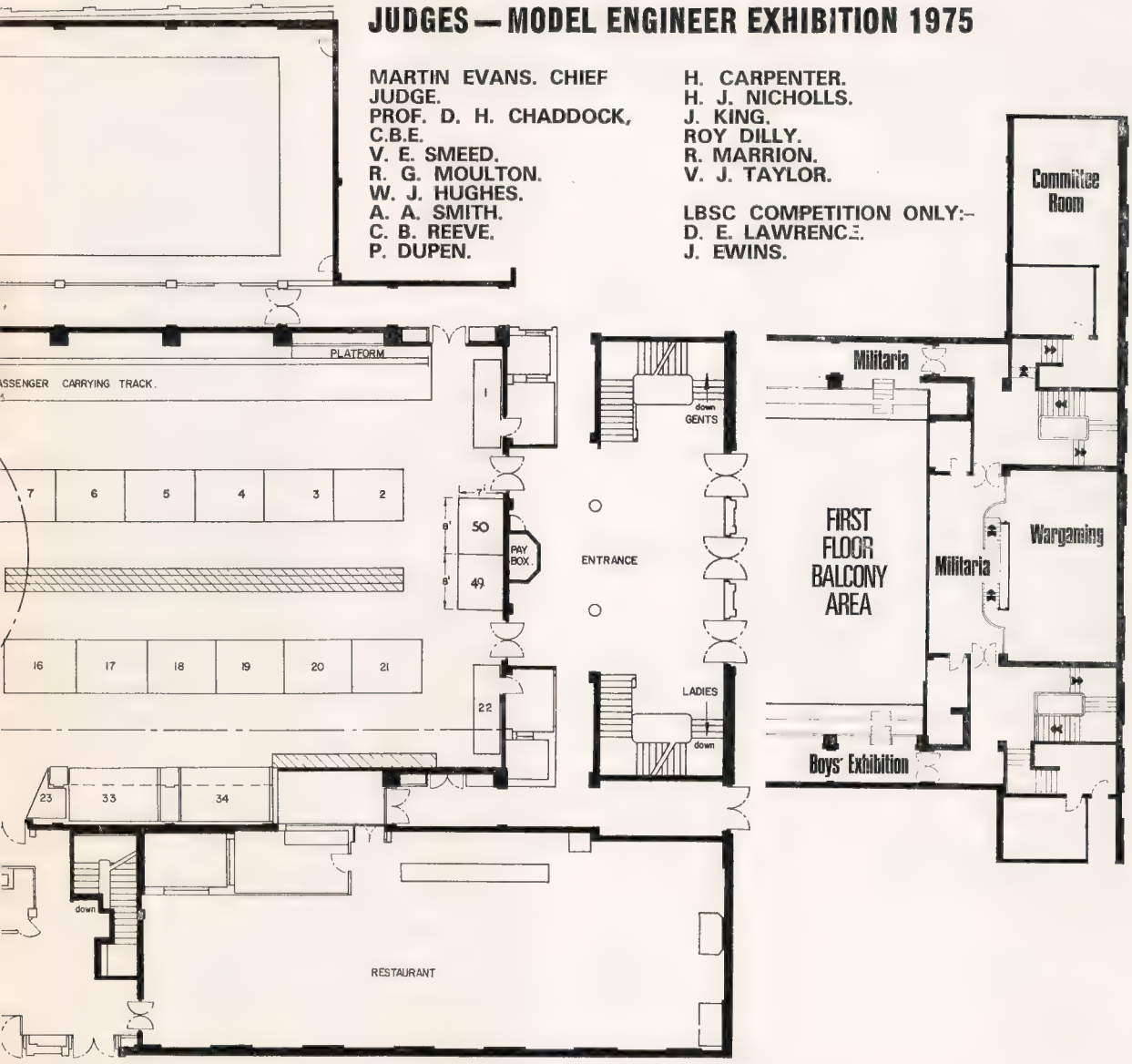

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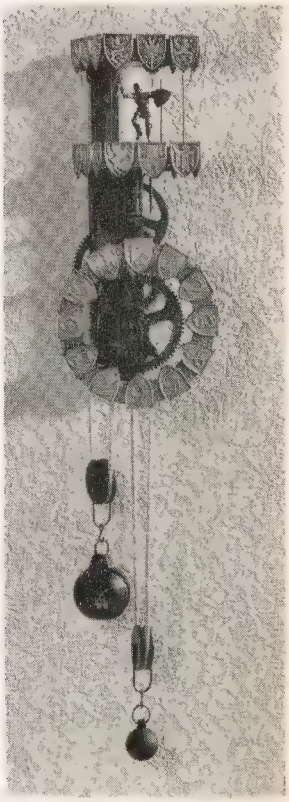

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This Brougham model in pewter from Phoenix Model Developments Ltd. comprises some 45 parts and can be constructed as shown or with a pair. Also from Phoenix is the 1/24th scale Victorian milkcart model. Figures to accompany the series are promised.

Alec Gee explores some new angles with

A Milkcart on the Mantelpiece

There was a time, and not really so very long ago, when what was available in the way of model kits fell automatically into the simple categories of model aircraft, model boats and, to a slightly lesser degree, model cars and railways. If the subject one wished to model was not included under one or other of these headings then, short of originating the entire thing oneself from scratch, there was absolutely no way in which the desired, out-of-the-rut model could be achieved.

Fortunately, this is not the case today and, indeed, it's a situation constantly receding into model-making history with every month that goes by seeing more imaginative model releases by enlightened manufacturers. Simply, the happy situation at present is that an explosion of model types and interests is occurring providing a wider variety of model choice than ever before. The restricted model aircraft, model boat and model car and railway fields have been joined in recent months by an exciting list of newcomers which includes military modelling in all its forms, model soldiers, figure collecting and painting, and a whole new movement towards models of subjects from a seemingly unlimited cross-section of history. And this, to say nothing of the equally sudden arrival of the home crafts hobby with do-it-yourself lapidary just one of its exciting facets!

But, jewellery making aside, some of the most interesting of purely modelling developments seem to have sprung from, or at least had their basis in, the military field. From the fullest exploitation of the military theme some manufacturers have intelligently moved on to explore new but related fields; pretty well every type of model soldier from every nation and every period in history is now available in figure form and it is only natural that something slightly different had to come next, conventional avenues having already been so well explored. The results have included 18th century tavern figures, naval press gang characters, Victoriana, Regency subjects and a host of related models including period furniture, room interiors and—the reason behind this brief discussion—a milkcart on the mantelpiece!

Actually, the milkcart—Victorian and in 1/24th scale—is just one of several new 'vehicle' models which underline this tendency towards the unusual in modern models. Others are for a knife grinder's cart and a hot chestunt barrow, all Victorian in period and all to a substantial 1/24th scale. Coaches and carriages too are suddenly and welcomely enjoying attention from manufacturers with new kits, some in metal, some in wood, for a Brougham, a Stanhope gig, a Wells Fargo Stage, Shillibeers horsedrawn Omnibus and a London to Liverpool Royal Mail coach; in all cases, horses are also available.

Surprising also has been the diversification of figure manufacturers, not exactly away from the military theme, but certainly at a distinct tangent. Latest ranges, fast gaining popularity with modellers—particularly so with wargamers—are space figures and characters from Middle Earth (or Mythical Earth as it is sometimes described, presumably so as to include a wider variety of wierd and wonderful creatures!). The whole upsurgence of 'fantasy' figures widens the original 'model soldier' market and, like so many of these developments, drastically broadens the modelling scope to embrace an ever increasing cross-section of the modelling public.

But these are all radical developments resulting in the manufacture of hitherto unthought of model types; what has been just as interesting is the subtle changes which true 'model soldiers' themselves have undergone in recent months. Until not so long ago figures were of two distinct types from the animation viewpoint; the first of these was the traditional 'on parade' standing at attention stance which most laymen will immediately recognise as The Toy Soldier and the second was the much more imaginative 'action pose' where the figure wielded a sword or was depicted in movement of a typical warlike nature. Now, however, comes a third type of figure, a product of the degree of sophistication gradually becoming more and more apparent in model soldier manufacture. Completely different in concept—as unique indeed in its own way as our milkcart—this third type of soldier figure displays neither the rigid smartness of the first category nor the animated drama of the second. Instead he sits on the fence, chair or table in undress uniform smoking and chatting to comrades, in shirtsleeves he tends his horse, or, in evening dress talks politely with coiffured ladies at regimental dances! More and more like him are being produced in this casual theme and he admirably spans the small gap between the model soldier and the model civilian, personified by tavern characters and Regency figures.

As we look deeper into the subject it becomes increasingly apparent that model enthusiasts have been better served; the beauty of the whole exciting diversification of new model availability means that some many more potential enthusiasts are now catered for. It is no longer necessary to be only interested in 'planes, boats, railways and cars to enjoy the benefits of kits and accessories—now even street traders' carts fans can start building!

This 'no longer have to do anything for oneself' aspect of modern modelling may be frowned on by many but, while admittedly it makes the creation of attractive finished replicas ridiculously simple by comparison to 'traditional' construction methods, it in no way infringes upon the activities or freedom of the 'go it the hard way' enthusiasts who is at complete liberty to pursue his interests in his own way. What it does mean, though, is that the most foolproof entry to what can become a rewarding leisuretime activity for life is offered to a maximum number of potential modellers and satisfactory results are, while not exactly guaranteed, highly likely from as early as the first attempt. And that can't be bad.

This 'all you need to go' package aspect of the hobby is no better illustrated than by reference to what has happened recently in the wargames world. Here an explosion in the availability of 'boxed' games has done much to introduce a vast number of new gamers to the delights of the hobby. Gone, for many, are the problems of amassing large quantities of painted troops and the construction and storage of sceneric accessories; now it's available, if less colourfully, in its own giant Monopoly-like box or folder with precut card unit counters to replace metal figures and a 'hex-map' to take the place of green baize and plastic trees!

To cap it all, there's even the stirrings of a movement towards models angled for women—one major plastic kit manufacturer has in preparation at the time of writing (for possible announcement at the 1975 Toy Fairs) models for a couple of Henry VIII's unfortunate queens in 1/12th scale—and who could deny that probably as many (if not more) girls as boys will be captivated by horsedrawn carriages, Victoriana, interior furnishings etc., all of which are now available?

This being the case and with our leisure time bound to increase over the coming years (so they tell us), the future of hand crafts, and model making in particular, seems rosy indeed. The already wide choice of modelling subjects available which we have in a small way attempted to describe here will, we predict, continue to grow and an insight into manufacturers' plans for future releases would prove fascinating; anything could happen and the least expected probably will.

54mm figures showing British officers (Edwardian) in off-duty poses by Ensign Miniatures. This is something new, and indicates willingness of trade to attempt less conventional subjects.

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Model Pow
Biggest Ev

Judges studying (and discussing with builders) scale ships at a previous European Championships. Dozens of such superb models are entered in various scale categories.

Some 17 or 18 years ago three or four European national model boating bodies initiated an international organisation to be known as Naviga. Approaches were made to Great Britain to become associated with this body but at that time there was little interest and the association went ahead without us, choosing for its basic languages German and French instead of German and English which had been its original hope.

Shortly afterwards an international regatta was held which, with the number of countries which had by then joined Naviga, could reasonably call itself the European Championships. These championships are held every second year and initially covered the whole range of power boats and free sailing and radio yachts, the venue being alternately eastern and western Europe.

After 1967 it was felt that the whole meeting was becoming too unwieldy and it was therefore decided that the model yacht side of things would run its own meeting in the years between the power boat championships, and static (glass case) models would be a further separate meeting.

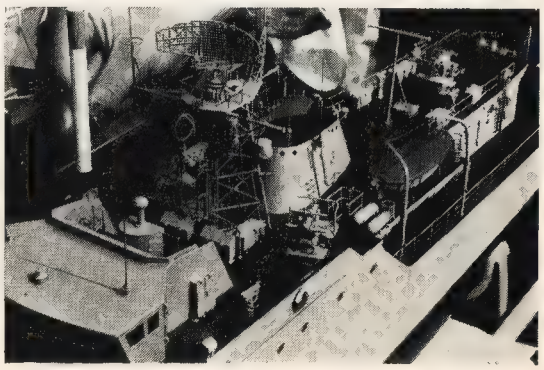
In the late 1950s a small number of British modellers attended continental regattas and the Model Power Boat Association was persuaded to become affiliated to Naviga in order that those who wished could compete as individuals rather than a national team.

Sufficient British modellers had visited continental regattas by the middle '60s to be able to persuade other club members etc. that these major meetings offered something quite different from domestic events, and a small British team took part in the 1967 Championships held at Amiens, France. Although they were not too successful, enthusiasm was fired sufficiently to ensure a larger team attending the subsequent meeting which was in Bulgaria, a larger team still travelled to Ostend in 1971 and a surprisingly strong team made the journey to Czechoslovakia for the 1973 meeting.

Now in 1975 the ninth European Championships will be held in England with the M.P.B.A. as hosts, the site chosen, after considerable thought, being Stanborough Lakes at Welwyn Garden City.

Some idea of the enormity of this undertaking is given by the necessity to cater for perhaps as many as 500 competitors with 700 boats in 20 or more different events. Many competitors will bring their families and there will also be Naviga officials to accommodate, not to mention a quite substantial number of spectators travelling to this country.

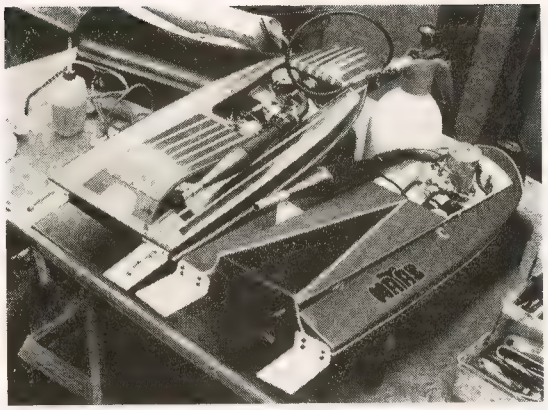
The Model Power Boat Association is naturally on its mettle; as the oldest association for model power boats in the world (formed 1924) it is determined to make this meeting a textbook example of how a championship should be run. The championships last for a week (August 3 to 10) but there will be a great deal of preparatory work beforehand and of course dismantling and clearing up to follow. Work has been in progress for nearly two years by the basic international subcommittee which has gone so far as to prepare a computerised critical path analysis in order to ensure meeting target dates in all the various ramifications associated with an exercise of this immensity. Not the least of the problems is the raising of sufficient funds to meet unavoidable expenses; there is no Government assistance of any sort and model power boats are not yet recognized by commercial firms as a worthwhile outlet for sponsorship to any great extent. Appeals for assistance in any form have been made and any reader who is prepared to help is invited to write to the M.P.B.A. Hon. Secretary, G. Colback, 19 Lea Walk, Harpenden, Herts.



A Russian - built winner at the 1971 Championships was this 30 in. finely detailed patrol boat. The cigarette gives an idea of the scale of this magnificent little model.

er Boatings

er VIC SMEED TRACES MODEL POWER BOAT PROGRESS TO 1975 CHAMPIONSHIPS



Two speed models, above right, show typical modern shapes. Not everyone's choice, but efficient and amazingly fast and exciting to watch.

William Beck, Fleet Street photographer, built this electric powered tug Moorcock, typical of the fine detail finish on today's craft.

The categories for which competitions are held are as follows: Class A, Waterscrew hydroplanes. A1 up to 2.5cc, A2 2.51 to 5.0cc, A3 5.01 to 10.0cc. Also run tethered are class B1 Airscrew hydroplanes with up to 2.5cc engines.

Straight running boats sail over a 60 yard course and are in three categories, EH scale merchant ships or pleasure boats, EK warships, and EX functional and semi-scale models.

All radio models come under the general F category but are sub-divided into F1 Speed, F2 steering, F3 functional steering, each of which is further subdivided, plus F6 Group manoeuvres by several boats and F7 special effects demonstrations by single scale models.

F1 speed is divided into five classes

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Functional steering comprises only two sub divisions, internal combustion or electric power boats.

In addition there are the multi racing classes FSR 15 for any type of engine up to 15 cc and FSR 35 spark ignition engines only with a maximum of 35 cc.

In most categories a country is limited to four entrants in each class but in radio classes only three are permitted. This still gives a maximum possible entry of 67 from each country and at the time of writing there are 19 affiliated countries with others with applications for affiliation pending. Fortunately perhaps it is unlikely that every country will field anything like a full team especially as the numbers are increased by automatic right of entry to gold medal winners from the previous championships and junior contestants.

The provisional programme runs as follows — Sunday August 3 and Monday August 4, arrival, accommodation, registration and processing of models with practice running on Monday and a civic reception for team managers and Naviga officials etc. in the evening, followed by a team managers' meeting. Tuesday, 5th August will see the opening ceremony and start of the competitions which will carry on through till Saturday lunch time; there will be social functions in the evenings and a whole day meeting of the General Assembly of Naviga. On the Saturday afternoon there will be record attempts followed by a Venetian Fete in the evening while the final medal presentation and closing ceremony will take place on the morning of Sunday August 10th.

There will be a great deal to see on any day during the meeting with the finest collection of models ever assembled in this country available for study and some of the top performers in the world competing. Even if you are not a boat enthusiast it will be well worth a visit.

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Tommy Prime (83 years young!) gets under way with his well-known 5 in. Speedy 0-6-0 T (Photo A. Roberts).

Martin Evans makes some suggestions & touches upon the subject of cost . . . .

Building a Live Steamer

WRITING in the Exhibition Handbook and Guide of the 1961 Model Engineer Exhibition, I suggested that although steam had disappeared from the railways of this country, this would have little or no effect on the hobby of building and running model steam locomotives. With the approach of 1975, it would seem that my optimism was fully justified, for the last three or four years have seen record entries of locomotives at the Model Engineer Exhibition and at many Provincial Exhibitions, in addition to which, there have been record numbers of locomotives running at the various Rallies throughout the country.

As against this, there have been suggestions recently that the present high cost of castings for model locomotives, not to mention the high cost of lathes and machine and hand tools, will have a severe adverse effect on future locomotive building. This attitude has perhaps been reinforced by my own article in last year's Handbook, where I described the recent increase in the popularity of the very large gauge models (7¼ in. gauge and upwards).

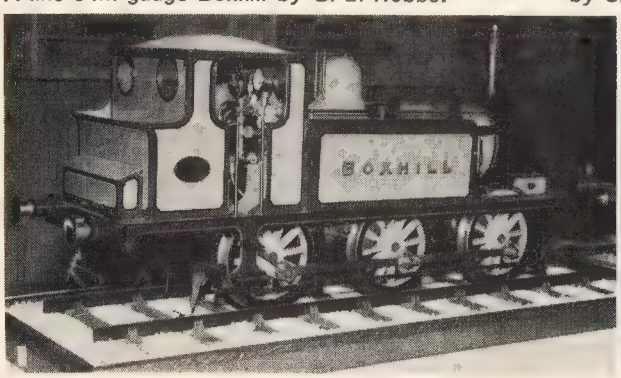
I think therefore that a few words on the question of the costs involved in our hobby would not be out of place at this time, faced as we all are with the awful spectre of inflation.

Although at first sight, it would be thought that the solution to the cost problem is merely a matter of building to one of the smaller gauges, say 2½ in. or 3½ in., this is not necessarily the best approach. If we want our locomotives to haul a good load of live passengers (and most of us do!); this can be done just as well by a very simple 0-4-0 tank engine running on 5 in. gauge track as by a 4-cylinder "Pacific" on 2½ in. gauge. The costs of building are roughly the same. The 5 in. gauge engine, however, will be much easier to drive, due to its much wider and higher cab, and also because its controls can be made considerably larger in size without looking too far out of scale. There is another advantage in the simple 5 in. gauger —it is much easier to build.

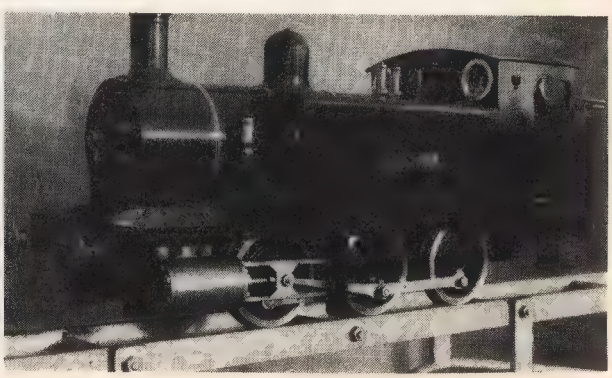
Of course, not everyone wants a 0-4-0 engine. Locomotives of this wheel arrangement are not too stable on the track when running at speed, and their adhesion weight cannot be made very great. The 0-6-0 tank locomotive makes an excellent type, and is no more difficult to make, the only extra work being basically the additional wheels, axle, horns, and the longer coupling rods.

The principal costs of building such a model are in the castings such as wheels, cylinders, horns, axle-boxes, smokebox saddle, chimney, dome and

A fine 5 in. gauge Boxhill by G. E. Hobbs.



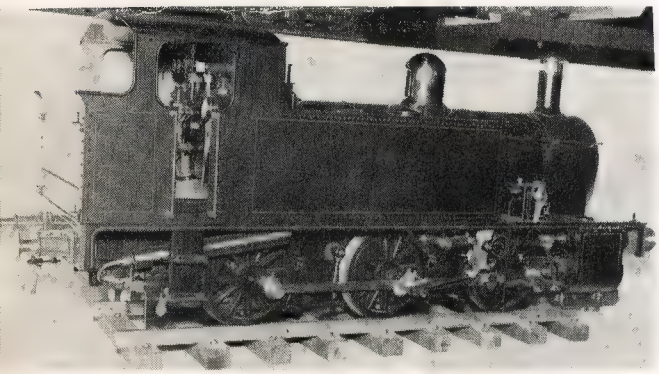
Rob Roy — another popular Martin Evans design by Charles Milne.



so forth, but many of these items can be fabricated. For instance, the axleboxes can be made from bright mild steel bar, with gunmetal or "oilite" bushes, the horns can be made from steel bar or angle; even the smokebox saddle can be fabricated from brass or steel sheet. So we are down to the absolute essentials of wheels and cylinders, and possibly the boiler mountings, though even these can be "spun" from sheet material

I do not usually like to mention actual prices of model engineering castings or equipment, but to get the question of locomotive building costs into perspective, perhaps I might quote prices of just a few items, taken from the catalogue of one of the best known advertisers in **Model Engineer**. Let us take a 5 in. gauge 0-6-0 tank locomotive with outside cylinders. The cost (at the time of writing) of the set of cylinder castings, wheels, feed pump, eccentrics, chimney and dome come to approximately £20. If the cylinders are in gunmetal instead of cast iron (not by any means essential), this would increase the cost by about £6.

Then of course we need the various items of bar and sheet metal, and it is not easy, without

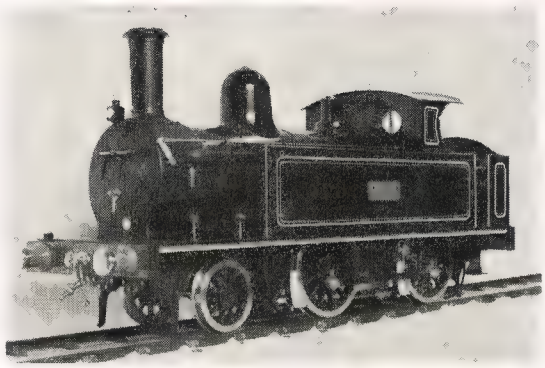


A fine example of Martin Evans' popular Simplex design (5 in. gauge) by H. W. Saunders of St. Albans.

making some quite elaborate calculations, to estimate the cost of these. For one thing, the builder might need, say, 2½ in. of steel bar to make the two crossheads, but having none of the required section in stock, might have to buy a foot of it as the minimum quantity. (e.g. a foot of bright mild steel 1¼ in. x ¼ in. might cost 40p. today, whereas 2½ in. would work out at only 8½p).

But even today, the cost of the mild steel sections required, plus the plate for main frames, should not be over £7, the stainless steel required for piston rods, valve rods, pump rams and fittings perhaps £2, and some gunmetal sections for bushes, fittings, stays etc., another £4.

This leaves the boiler and platework. If brass is used for running boards and cab and possibly bunker, this does increase the materials bill quite considerably, but again, mild steel can be used for many of these items, and even the side tanks can be made in steel, with a thin copper or brass



An unusual small tank for 3½ in. gauge by H. A. Taylor of Bletchley.

tank inside. As for the boiler, a set of flanged copper plates may cost about £8 for an engine of the type we are considering, and—perhaps the heaviest item—the boiler barrel, sheet material, and tubes another £12.

Having added all these items together, the builder may think that they come to rather a frightening sum, but it must be remembered that the building of the engine may take anything from 12 months to three years, and spread over this period, the weekly figure is really quite modest. (Even over only 12 months, the outlay comes to only £1.60 or so per week—less than many spend in the "local").

I have not of course taken into consideration the cost of workshop equipment, which is quite a different matter; but I will say this, that anything spent on good quality machine tools is money well spent, especially if they are carefully used (as they nearly always are in the model engineer's workshop). The rate of inflation is such that a good quality model engineer's lathe purchased, say, in 1964, is today worth as much as its initial cost,

Phil Hains (Harrow & Wembley Socy.) drives his 5 in. gauge L.B.S.C. 0-6-0 T Barcelona.

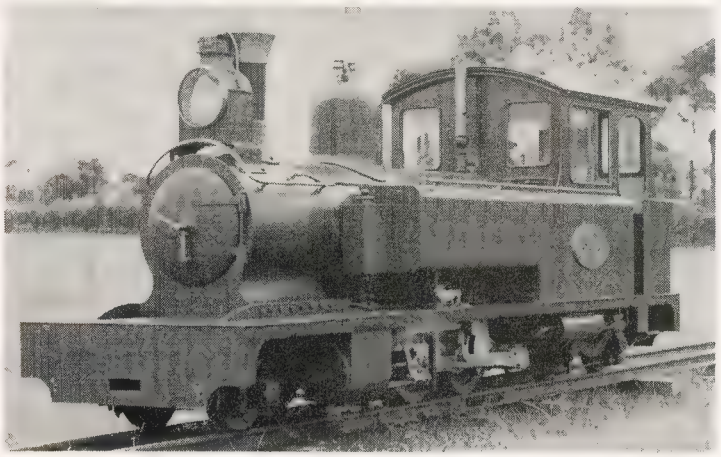
even though it may have turned out an enormous amount of work in that time.

Now for a few words on the subject of choice of prototype. I make no apology for reverting once again to this problem, as I consider it most important. All too often I hear from disappointed locomotive builders who rushed in to build a large and complicated engine as a first attempt, little realising how much work is involved, and it is not surprising that some of these people, anxious to get their locomotive on the road as soon as possible, lose heart at the time required.

Having resolved the gauge and scale problem, the prospective locomotive builder will probably be an enthusiast for one particular British railway, or perhaps for American type engines. As I mentioned earlier, there is a great deal to be said for the 0-6-0 tank engine. All the main British railways had various types of 0-6-0, so there is an almost unlimited choice. Beginners are generally warned to avoid inside cylinders, as this involves a two-throw crank-axle. This seems rather a pity, as many of the most attractive full size engines had inside cylinders. However, with the advent of Loctite and other engineering adhesives, the building of crank-axles has become very much easier.

Locomotives having "round-top" boilers with parallel barrels are to be preferred, unless the builder has had a fair amount of experience of boiler work. The question of whether the cylinders should be of the slide valve type or piston valve is one that is continually being debated, though most model locomotive men would agree that piston valves call for some high precision lathe work, if success is to be achieved. The choice of valve gear may depend on the gear that was fitted to the full-size engine, but in the case of inside cylinder locomotives, the builder can choose Walschaerts, Stephenson, Gooch, Allan straight link, or Joy, or perhaps even the simple slip eccentric — though this gear robs the driver of the ability to reverse his steed, or alter the cut-off, from the cab.

Beginners to this great hobby of building model steam locomotives sometimes complain that the magazine **Model Engineer**, which carries regular articles on locomotive construction, is too slanted towards the expert. They will therefore be pleased to hear that a lengthy and comprehensive series written especially for the beginner is now being published, at intervals of four or six weeks, so no budding enthusiast should miss these issues.



Railway Project

WATERHOUSES SECONDARY SCHOOL STOKE-ON-TRENT

The one-third fullsize steam replica of the Leek — Manifold Valley Light Railway locomotive "E.R. Calthrop" which Waterhouses Secondary School will be showing at the exhibition this year is very much the "tip of the iceberg" of a most ambitious railway project. Basically the school plan to lay and operate a 10¼in gauge steam railway capable of carrying up to 150 passengers and using scale replicas of locomotives and rolling stock as used on the L.M.V.L.R. This will involve senior boys in every aspect of track laying from survey through to grading. It offers work in the metalwork shops and in the open air with a worthwhile object in view. Meanwhile the girls are playing their part by dealing with all correspondence relating to the scheme.

Already there are signs of progress in the shape of the locomotive built to original drawings by Coleby-Simkins Engineering of Melton Mowbray. This was tested on Lord Gretton's railway at Stapleford Park and has attracted considerable valuable publicity with to date six radio broadcasts and two appearances on B.B.C. television, plus offers of a television documentary when actual track construction gets under way.

Meanwhile local authorities and other influential groups have given their wholehearted support. The school will be using an old disused railway station plus part of the old railway track bed. The track mileage will be through an area of considerable beauty and should attract worthwhile tourist support, a valuable thing since ultimate finance will be dependent on operating a regular service from May to September.

Special mention should be made of the efforts of Headmaster Brian Nicholson, well known as a live steam enthusiast. His enterprise may well be followed by other schools intent on interesting non academic youngsters in that last 15/16 year period at school.

A Craft for the Ladies!

A TASTER FROM EDITOR EVELYN BARRETT

Our magazine GEM CRAFT which was first unveiled at last years Model Engineer Exhibition, and excited so much interest, is now a thriving 72 page monthly, covering more and more subjects in each issue. Once again we are bringing in some of our contributors to demonstrate to the public the many facets of the magazine—so wide that it is impossible to cover them fully in such a short article.

Some aspects are more capable of being demonstrated as a short term display than others. For this reason we are showing enamelling—which proved so popular last year, and have once more persuaded that internationally known enameller, Hans Theilade, who is probably responsible for the revival of the craft in Britain over the last few years, to come along and demonstrate.

Harry Lister will be here with some of his more interesting Fossils and promises specially selected small pieces for the younger visitors—who are often more knowledgeable than the adults.

Public interest in rocks and minerals has risen tremendously in recent years. Not so very long ago relatively few people had ever seen a lapidary at work. The popularity of baroque jewellery has awakened the public to the fact that many semi precious stones have great intrinsic beauty and that these, when polished and set into mountings or 'findings' produce handsome jewellery. This is featured each month in GEM CRAFT'S "Pendant For Pauline" series which shows how you can transform polished stones into pendants, rings and bracelets.

Or perhaps you always intended to polish the pebbles you picked up on holiday and would like to see and **hear** a tumbler—a tumbler in action—and examine the result. In the search for material most enthusiasts take to the field or beach and follow our features for the Rockhound.

This will lead you on to enquiring about how to cut and polish gemstones. Lapis Lazuli from Afghanistan, Turquoise from Persia, Tiger Eye from South Africa. The very names are magic, Peacock Obsidian, Apache Tears, Green Moss Agate, Rose Quartz, Garnet, Amethyst, Tourmaline and Peridot. How can anyone resist them or wanting to know more about them. Or possibly you would like simply to collect the minerals—beautiful specimen pieces of Pyrite, Sulphur and Calcopyrite. This is a very fashionable hobby and one which should reap dividends both in the interest and pleasure gained and also, as with many other commodities, grow in value as the earth's natural treasures gradually become scarcer.

In collecting, the spectacular beauty of the fluorescent minerals soon becomes known and fine specimens become much desired show pieces.

The Amateur Geological Society will have their fluorescent mineral cabinet on display, demonstrating the magic of ultra violet as a drab looking rock leaps into vibrant colourful life under its light.

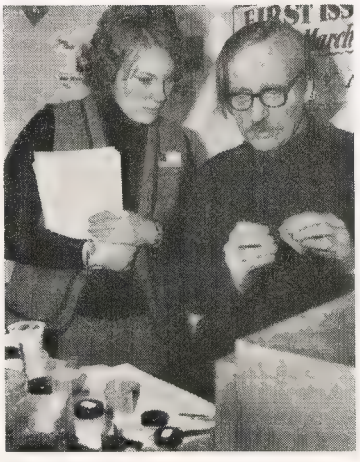
See samples of our special mineral offer which has proved such a success or get up to date details on our trip to the gemstone centre of Europe — Idar Oberstein — or our very first GEM CRAFT EXPO 75 which will be held at the Rembrandt Hotel, South Kensington, next Easter.

If we cannot completely demonstrate Silvercraft, Treasure Seeking, Plastic Embedding, Horseshoe Nail Jewellery, Lost Wax Casting—then we can give you the latest information on the subjects. Tell you where your nearest Club is and how to join.

And, perhaps most important of all, GEM CRAFT is the one branch of crafts covered by our group of magazines which is truly unisex and gives wives and girlfriends an opportunity to come into the act on entirely level terms.

A splendid brooch in gold and precious stones made by veteran boat modeller Harry May — never too late to start or try something new!

Peter Jackson shows how to get a really good finish on a piece of tiger eye.



Hans Theilade lets Hilary of our Advertising Department into the secrets of enamelling.

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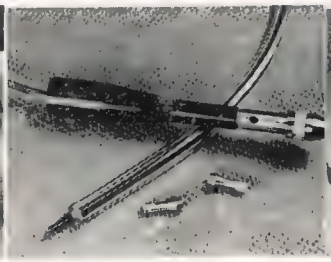

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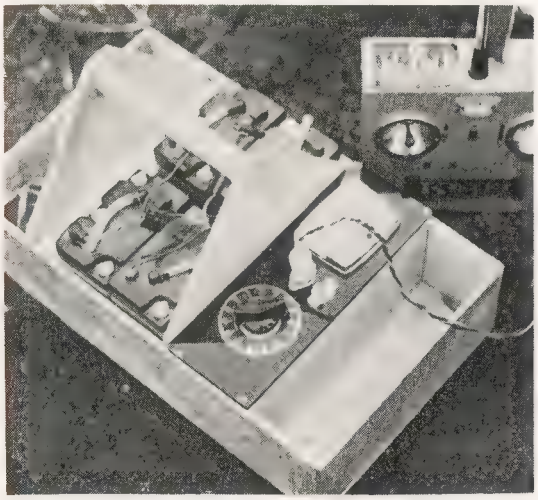


Changing Patterns

New materials, techniques and

Surrounded by latter day developments in Electronics, Plastic and engineering techniques, the modeller of the seventies has such a different outlook on his hobby to that of the pioneers that in some instances he has virtually opened up a new field of approach. Nowhere is this more evident in aeromodelling where daily achievements ridicule old impossibilities.

It is possible to purchase ready-to-use radio control equipment that can be installed without any technical knowledge, in an assembly kit for a working model helicopter which a relative novice could learn to pilot through identical manoeuvres as for the full size. Or one can fit an electric motor in a model, power it with rapid recharge cells and fly with perfect silence from the suburban park. Perhaps the reader prefers armchair aeronautics? Then why not make a Hawker Harrier in plastic from hundreds of parts, fit it with a dummy jet engine, accessible through scale size maintenance panels, have a true-scale detachable wing, retractable undercarriage and equipped cockpit. Or perhaps the choice might be a helicopter in plastic? Then the latest is a large scale model Hughes with such detail that even the colour of the pilot's eyes will be required research when at last the painting stage is reached. When finished, this "chopper" can fit a motorised simulator to emulate its real counterpart.

Such things are not cheap, but they sell in quantity and reflect the purchasing power, and the attitudes of many new recruits to aeromodelling. And why not? The enthusiast who seeks perfection with minimum effort is just as welcome as the constructor who prides himself on making every component, to the last bolt. Time and money relationship have a new meaning in life. In turn, the changing approach has its influence on aeromodelling as a whole.

The electric powered model, the radio controlled helicopter and the plastic kits have a lot of engineering development in common. They reflect the trend towards provision of the boxed, mass produced moulding or engineering sub-assembly. The customer recognises the work effort needed to produce his carton full of almost finished assemblies and is prepared to pay for what he freely admits is beyond his own personal manufacturing capacity. So the market is created. Supply and demand enter an eternal race to satisfy one another. But for the creative aeromodeller, still seeking the delights of working with balsawood, tissue and flat rubber strip the picture is different. These traditional materials, which for the past fifty years have been a staple diet for aeromodelling con-

Top: Part plastic, part conventional structure, electric power assisted glider produced in Germany, soon to appear in Britain. Centre: Airfix 1/24th scale Hawker Harrier — complete with Jet engine and every part detailed, a fine example of the latest plastic scale aircraft kit. Left: Field box of the future. No fuel or cleaning cloths — just a group of lead acid accumulators, a timing device and a spare pack of flight cells for the radio controlled electric powered model.

# of Aeromodelling

achievements — by Ron Moulton

sumption have each become casualties in the time/money battle.

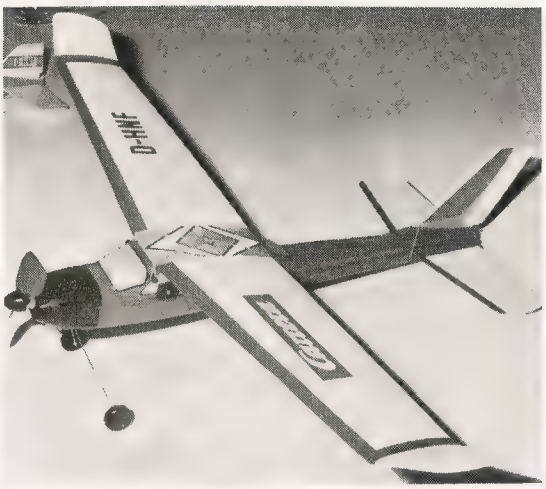
Balsa is used to line the mammoth liquid gas tankers. It is perfect for the job. No plastic has yet produced as good an insulator. But one ocean tanker takes what was not long ago, as much balsa as might be consumed by all the World's aeromodellers in a whole year! Moreover, tanker-balsa fetches more money, and other commercial applications also offer better prices for what was once just raft material to float Ecuadorian bananas from the highlands to the coast. Hence, balsa shortages and price escalations. It has largely been due to the sympathetic attachment of the balsa "kings" (who control the Ecuador balsa sources), to their origins with aeromodelling, that any supply to maintained.

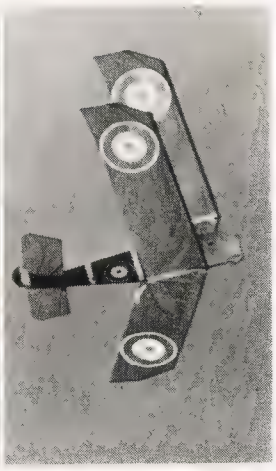
Tissue may lose colour. Yes it may soon all be white only! To dye it is now exorbitantly expensive and world consumption so low by comparison with other white paper demands that colouring may well go "out of fashion". Handmade tissues, the softest, lightest and strongest from Japan are 15 times the price of two years ago, and in very short supply so that the winter of 1974/75 is likely to erode all reserve stocks.

Rubber, produced in Britain by Dunlop and Italy by Pirelli is a thing of the past. Model use comes low in the chain of demand for flat strip rubber, and technicians have produced man-made substitutes which fill the bill for everything from grapevine binders to knicker elastic and put the latex product out of business. Happily there are sources of genuine rubber to fall back on—mostly in the U.S.A. Aeromodellers always find a way to overcome their problems, even if it means substitutes and the good old tissue covered framework, rubber driven model will always appear despite shortages.

Aside from the problems, there are compensating advantages of new techniques. Expanded polystyrene in the form of a foam plastic core is used for model wings. Sheet film is widely employed for model covering and eliminates the need for dope and colouring. Rapid setting epoxy adhesives provide strong joints of mixed materials, and mouldings in ABS or glass fibre frequently replace whole structures.

To the newcomer, unfamiliar with previous aeromodelling practice, there is little that could be said to be strange or difficult but to the returning enthusiast, perhaps taking up the hobby after a break of some years, there will have to be some acclimatisation!





Top: All plastic electric model with rapid rechargeable batteries. Torch cells are used to supply energy for 20 secs or more power run from a one minute charge. Centre: Latest trend! Aircraft kites! From America, the silhouette kite, a simple framework which in this instance is a Sopwith Camel. Right: First across the Channel, Dieter Ziegler is greeted by French 'Douannes' at Boulogne on arrival after a 67 minute flight from Ashford with his scale Bell 212 Radio Controlled Helicopter.

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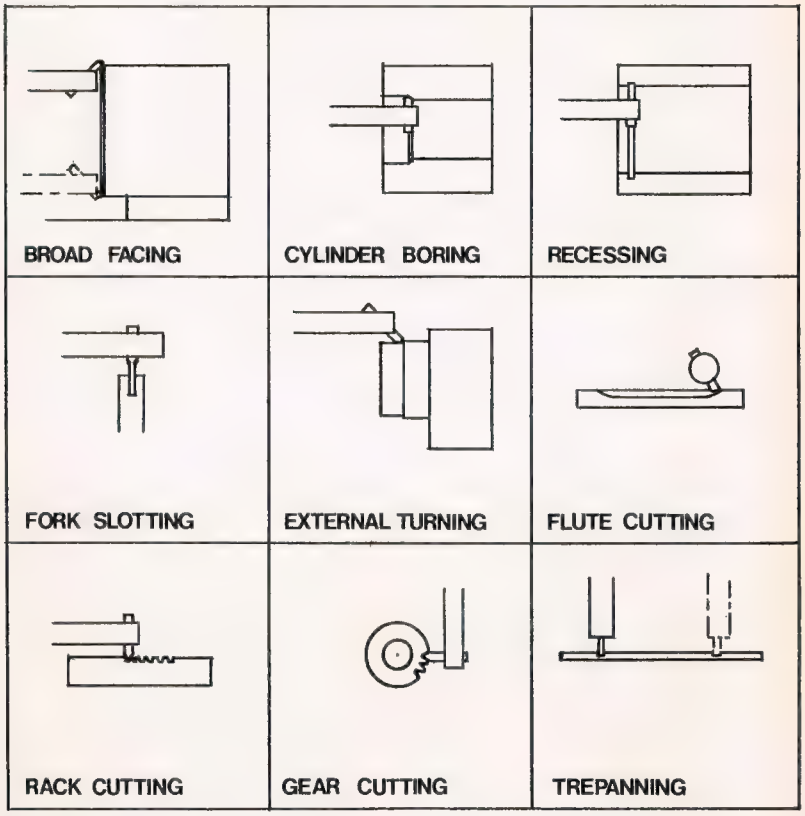

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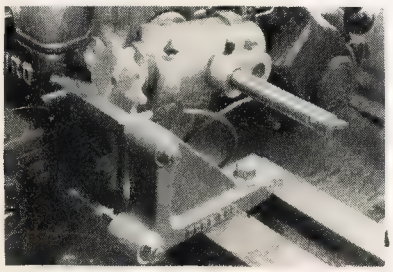

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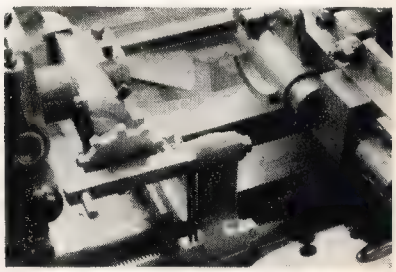

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Stands 2, 3, & 4
N. MOLE & CO. (MACHINE TOOLS) LTD.

N. Mole & Co. (Machine Tools) Ltd. will again be exhibiting a range of machines and workshop equipment on stands Nos. 2, 3 and 4 at the 1975 Model Engineer Exhibition.

On show will be a selection of lathes by most of the leading manufacturers such as Myford, Boxford and Denford, although it is regretted that they are not all available for immediate delivery. A selection of accessories for these machines will also be available for inspection.

Also on show will be the 'Amolco' ½ in. capacity 4-speed drilling machine which created a lot of interest at the exhibition last year, and it is hoped that it will be more readily available this year.

A good selection of measuring equipment, rotary tables, machine vices and all the usual requirements of the model engineer will be displayed, and members of N. Mole & Co. Ltd. staff will be on hand to discuss customers requirements, part exchanges etc.

Stand 5
TRACTION ENGINE ENTERPRISES

A regular feature of the Model Engineer Exhibition is the ever-popular Traction Engine Enterprises Stand. Once again the company will have a large selection of Records, Books and Models on Railways, Model Engineering, Traction Engines, Trams, Fairground and Street Organs, Canals, etc., 'Vintage Steam' and 'Old Motor', and a large range of Colour Slides, Framed Prints and other enthusiasts' items will also be on sale. Also a full range of pre-recorded cassettes.

There will also be a very large display of die-cast collectors' models on show. Rare Lesney, Dinky, Charbens, Benbros, Morestone, Budgie, Corgi and Timpo die-cast and Triang Tin Plate Models will be on sale.

Also represented on the stand will be Traction Engine Enterprises' associate company M.E. SPECIALIST PUBLICATION SUPPLIES, the leading supplier of bound, unbound and loose issues of Model Engineer and English Mechanics and a large range of Model Engineering books. Rare Model Engineering books now out of print will also be on sale.

A very large range of Model Engineer Indexes which have recently been reprinted by the company will be available to enable enthusiasts to complete their collection and volumes.

Of special interest to visitors will be the two new books recently published by the company — "Apprenticeship in Steam" The Memoirs of a General Engineer. By Jack Hampshire this relates the author's experiences in a general engineering works repairing and building all types of steam and early I.C. engines. The other new book is "The Fordson At Work" a reprint of an early 1920 tractor sales catalogue issued by Fords of America with a foreword by Henry Ford.

Stands 6 & 7
MYFORD LTD.

MYFORD LIMITED, have been manufacturing lathes for the model engineer for nearly forty years, though almost from the inception a certain proportion of the machines have been used by industry both for production and experimental purposes. As the years have past, the proportion so used has increased appreciably.

The quality of the machines, the degree of interchangeability, resulting in the case with which replacement parts may be fitted and the very wide range of additional equipment which covers not only the conventional centre lathe accessories but also milling equipment such as vertical slides, milling equipment such as vertical slides, milling arbors, dividing attachments and so on have all contributed to the world-wide popularity of MYFORD lathes. So far as the ML7 and Super 7 lathes are concerned, there is also a range of purely production equipment such as lever operated collet chuck, lever operated and screw operated part-off slides and six-station turrets.

Particularly so far as quality is concerned, the MYFORD lathes have gained appreciably from the fact that they are manufactured in the same plant alongside the range of precision cylindrical grinding machines.

The exhibits will include the ML7, Super 7 and ML10 metal turning lathes, Tri-Leva speed selector, quick change gearbox, and Rodney vertical milling attachment and an ML8 woodworking lathe and equipment. Demonstrations will be taking place throughout the exhibition.

Stand 8
WALL MODELS LTD.

Wall Models Ltd. on stand No. 8 will once again be presenting a range of figures, equipment and accessories catering for all the needs of Wargamers and Military figure collectors.

This year we shall specialise with figures and equipment by Miniature Figurines, Lasset, Phoenix, Garrison and Lamming.

We shall also have a wide range of plastic kits of military interest, by Airfix, Fujimi, Hasegawa, Bandai, Eidai, etc., together with Almark and Osprey military books, and the famous Westwood Cavalry Uniforms Calendars.

So come to Stand No. 8, where all the staff are also enthusiasts in all fields of wargaming and military figure painting and collecting.

Stand 9
HISTOREX AGENTS

For the 7th consecutive year Historex have pleasure in exhibiting at the Model Engineer Exhibition. In our first write up in 1969 we had to explain who we were and what we produced. Now Historex are well established as the leaders in the field of plastic engraving. Specialising in Napoleonic soldiery, there will be some most superb examples of the model maker's skill on show. Figures made by enthusiasts in the U.K., France and the U.S.A. New and interesting figures not seen in previous years will be exhibited. The usual sales service will be available and technical advice offered.

The staff of Historex Agents who man the exhibition stand look forward to meeting all their old customers and to introducing new ones.

Stand 10
SERIES 77

'Series 77 was started some four years ago with the idea of promoting interest in the larger type of military miniature, because it was felt that more detail and better quality could be obtained. This has proved to be the case, and with all due modesty, we can now say that we have set a standard which everyone tries to emulate.

This year, in addition to our usual extensive range, which includes many painted Dioramas, we shall have a display of original Art, work by Gerry Embleton, the well known military artist. We are also enlarging our collection with two new ranges of 54 mm figures by two modellers new to the commercial field.

We look forward to meeting all our friends, and any new ones that care to come and see us at our Stand.'

Stand 11
OLD GUARD — NEW HOPE DESIGN

OLD GUARD are showing a full selection of their exquisite miniature figures. Special notice must be given to the models in 25 mm and 54 mm size designed exclusively for the company by the renowned Charles C Stadden. These are the first in a continuing series of figures by a master craftsman.

Also on display will be new models by Andrew Chernak, Malcolm Dawson and Alan Kemp as well as the earlier figures—which instituted Old Guard's reputation for exceptional quality—by William H. Murray, founder of Old Guard.

Supporting Old Guards own figures are a fine series of Napoleonic soldiers on campaign, the initial offering from Deauville Models. The complete selection can be seen and inspected at the stand.

A new range of British Empire and Colonial figures comes from Assegai Miniatures. In 54 mm size, these soldiers concentrated on featuring the troops who fought the bitter little wars which punctuated the growth of the British Empire.

For the 'O' Gauge model railway enthusiast, Branchline figures provide accurate and well detailed types of passengers and railway staff. Designed by Malcolm Dawson, these 42 mm figures provide a perfect complement to a model railway layout.

In addition, the incredibly detailed guns and vehicles in the GHQ Micro-Armour range show what can be achieved in the tiny 1:285 scale. Designed basically for the wargamer, GHQ items nonetheless meet the exacting demands of the connoisseur and are ideal for the collector who has limited space. GHQ—the original and much imitated micro-armour—still leads the field in design and casting standards.

Campaign Colours, the oil bound poster paint especially developed to meet modern demands for a superior finish is also featured at the stand. Originally based at Hull. Campaign Colours recently joined forces with Old Guard at New Hope Design. The 32 colours in the range allow the collector and wargamer to finish every model in accurate and authentic shades.

At the stand, you will be able to meet and talk with some of the people who design and make the products that come from New Hope Design, the English home of Old Guard, GHQ, Deauville, Assegai, Branchline and Campaign Colours. You will be welcome whether you want to discuss and buy or merely look. David Winter, Malcolm Dawson and Nick Lucas will be amongst those who will be on the stand from time to time.

Stand 12

MINIATURE FIGURINES LTD.

Miniature Figurines Limited or to call them by their well-known Trade Mark MINIFIGS are unique in the sphere of Wargame figure Manufacturers. Besides the production of conventional models covering Ancient Egypt to the Boer War, they have captured the imagination of Science Fiction Addicts by producing over the past twelve months Sword and Sorcery. Mythical and Science Fiction Ranges that widen and increase the scope and interest of Wargaming and Collecting.

Both newcomers and avid Wargamers need look no further than Minifigs. Their extensive range, unique in itself, high standard of design, constant quality of products and prompt attention with mail order requirements togther with the policy of supplying only retailers specialising in Models and Modelling with personal and friendly service makes Minifigs envied throughout the hobby.

With well over three thousand figures in production, Minifigs is nevertheless continually adding and improving the two main scales of 25 mm and 15 mm, designed at 4 mm and 2½ mm to the foot respectively. Although the figures are basically six foot men the varying type of headgear and stances gives a visual impression of different sizes yet maintains the conformity of design and scale originated by the Design Richard Higgs five years ago.

Rightly Minifigs boasts, "The Best Name in Wargame figures". Producing a vast range, manufacturing in the best quality jewellery alloy available, backing this up with a service second to none including plants in America and Australia.

Stand 14 & 15

MODEL & HOBBY CONSORTIUM

Model & Hobby Consortium once again has one of the largest selections of models on display. Famous for new arrivals at exhibition time, this year should prove to be a bumper occasion, with imminent deliveries from several world famous manufacturers.

As usual experts will be on hand to help you chase your requirements (our in depth stock can be quite bewildering!).

This year we are concentrating on plastic kits, wargaming and soldier modelling. We have always been at the forefront with model soldiers and our display proves the point, with a collection catering for all tastes and pockets.

Our selection of plastic kits is simply unrivalled!

Stands 16, 17 & 18

BEATTIES OF LONDON LTD.

Once again England's Leading Model Shops will be exhibiting a large selection of their ranges, including Triang-Hornby, Hornby-Minitrix, 'Fabulous Fleischmann', Wills Kits, L.G.B. and, of course, the smallest of all 'Z' gauge by Marklin. Preiser '00' and 'N' figures, Faller '00' and 'N' model kits, Wiking models.

Also on show, and for sale, you will find most railway accessories, i.e., Riko scenic accessories—trees, grass mats and colouring. Busch 'N' gauge scenic accessories. Weller soldering iron.

For the modeller there will be kits by Tamiya, Airfix, Billing Boats & Revel plastic kits. Meccano. Paints by Testor and Badger Air brushes.

Stand 19

PLAISTOW PICTORIAL

Plaistow Pictorial have their complete range of prints and posters available on Stand No. 19. Many new prints have been added during the year, from pre-war railway prints to the latest diesels in colour. A new size of moderately priced colour prints has been introduced, ideal for the serious collector.

Also all back issues of **After the Battle** magazine, the very popular publication actually produced on the battlefields of Europe, which presents WWII through 'then and now' comparison photographs.

Stand 20-21

HINCHLIFFE MODELS LTD.

Although comparatively late arrivals in the field of top commercial military miniature manufacturers, Hinchliffe Models have quickly established a lead in all aspects of the business.

Taking what was virtually a cottage industry, they have brought about an entirely new concept into the manufacturing and distribution aspect of the hobby, making them international brand leaders.

Professionally based, the outward image of Hinchliffe Models is sound; their production ability, delivery and presentation is second to none. Coupled to this their association with a growing group of both proven and new designers ensures the continued introduction of the more unusual model with an ever increasing improvement in design and quality.

Stand 22

KENNION BROS. (HERTFORD) LTD.

Charles Kennion is once again on Stand No. 22; (it is still to the left of the main entrance of the Hall) and is still giving you the benefit of now 54 years of practical model steam locomotive building.

This knowledge and experience is backed by an almost limitless supply of drawings-castings and all materials to build a steam locomotive from "O" to 7¼ in. gauge.

The raw materials and tools on display are; taps, dies, drills, "D" bits, dieholders, wrenches, box spanners, boring bars, rivet snaps, miniature end mills, centre drills, springs and a full range of all small sizes of tubing, rods and sheets, in brass, copper and steel.

The supply and range of fittings has been widely extended, covering three sizes of drain cocks, three sizes of injectors, five sizes of lubricators, four sizes of water gauges, check valves, blower valves, by-pass valves, injector valves, blow down valves, W/V and Turretts, whistles, eighteen sizes of safety valves, eight types of pressure gauges, and the latest addition to the range, sets of pawls, springs, ratchet wheel and sheet brass cut to size to make LBSC type lubricators, dead flat and true to size.

Lastly, very, very small hardened steel taper pins with tapered reamers to match. Five sizes 1/16 to 1/8.

A call to the stores at 2 and 2A Railway Place, Hertford, will be an eye-opener and a delight to all those seeking raw materials or advice.

Stand 24

STARCAST MINIATURES

Micro-Scale wargaming is becoming increasingly popular, a demand being well catered for by the diverse ranges of Starcast Miniatures.

A comparative newcomer in the production of these tiny models, since May of last year this lively company has progressed at a very impressive rate.

The periods and scales covered so far include, 1/300 W.W.11. Warplanes, Micro spacecraft, 1/2400 W.W.1. Warships and 1/2400 W.W.11. warships.

The 1/2400 scale warships merit a special mention due to their unique size, which brings scale gun ranges within a reasonable playing space for naval wargaming yet still allows for considerable detail to retain the athetic appeal.

On display on the Starcast stand will be up to 100 different models covering the current ranges and to help in selection, lists will also be available.

Among the noteworthy points is the careful attention to detail incorporated in the master patterns despite the small size, all models are cast entirely in high grade tin alloy which contributes to make the competitive prices very good value.

As regular readers of Military Modelling will know, Starcast also operate an excellent mail order service and details will gladly be given to visitors to the stand.

Stand 25

HELD PRODUCTS

500 years ago clocks with hand carved wooden wheels, a horizontal Foliot beam escapement and cobble stone driving weights were used to tell the time. We are showing five different replicas full of medieval Black Forest charm. Each clock is also available as a handsome presentation pack construction set containing all the pre-machined parts to make a clock. The well illustrated assembly instructions tell you the recommended driving weights which you have to find yourselves.

The earliest model is the wrought iron watchman's clock which dates back to 1350. Two of the later wooden versions have oak frames, one with its imposing 14 in. diameter dial and the smaller with its unique rotating dial. A humorous spin off is the flying pendulum knight clock with its almost hypnoidal escapement. The popular early Gothic clock with its beech frame and simple assembly completes the range.

If you have stone walls, oak beams and an artistic practical member of the family we are sure you will find our stand particularly interesting and we look forward to meeting you.

Stand 26

BADGER AIRBRUSH

The finest method of painting models and scenery is being demonstrated with Badger Airbrush equipment on Stand No. 26.

The U.K. master distributors, Morris and Ingram (London) Limited, are showing the full range of the famous Badger Airbrushes which have brought spray-finishing within the reach of everyone's pocket.

The Badger 250-1 is very popular, especially among beginners, for single-colour finishes and wide coverage. A precision instrument, it will spray most kinds of paint and varnish and allows the user to mix his own shades.

The Badger 200-EX will produce sophisticated colour schemes, from fine lines and delicate shading to special camouflage, weathering, exhaust and other effects, as well as a broad spray.

The superb Badger 100-XF and the recently introduced Model 100-GXF are 'professional'' instruments designed for meeting the highest possible standards of craftmanship. Along with one-finger control of mixture and pressure, they have a number of unique features for ease of maintenance and long life.

Visitors to the stand can examine the two main means of supplying the necessary air-pressure for the Badger Airbrush. There are the inexpensive Mogramair, which is Morris and Ingram's own brand of canister propellant, and the Hornet portable mains-electric air-compressor. The Hornet is made by Campbell-Hausfield for whom the Poole, Dorset importers are also U.K. master distributors.

Stand 31

GREENWOOD AND BALL LTD.

Greenwood and Ball have a long established tradition of manufacturing high quality model soldiers for the enthusiast. Now with our new factory manufacturing from Thornaby in the North East, we are able to offer you an even wider selection of fine figures by famous designers—Lasset, Sanderson, Cameo miniatures in the larger 54 mm scale and for the wargamer, Garrison 25 mm figures in the new entirely revised range by the inimitable John Braithwaite.

Whilst models are our mainstay, Greenwood and Ball have recently branched out into the publications field and our first offering, uniform information books of nations in the Seven Years War recently made their eagerly awaited debut. Each of these books meticulously researched, and are illustrated with line and full colour drawings.

Our staff and officials on Stand 31 extend to you an enthusiastic welcome to see our products. If you have any queries or indeed observations to make during your stay at our stand, please feel free to consult us—your interest is our business.

TRADE EXHIBITORS continued.

Stand 37

BIVOUAC BOOKS LTD.

Bivouac Books Ltd. are specialist publishers & booksellers in the fields of aviation, naval and military history and American Indian tribal warfare and culture. Publications include the ENSIGN series of naval monographs and the UNIFORMATION Napoleonic reference prints. Foreign agencies include MUNIN VERLAG'S Waffen-SS Divisional Histories, McCOWAT-MERCER'S American Civil War list, LEEWARD'S Ships Data series, CIVIL WAR TIMES ILLUSTRATED, etc. Highlights in the remainder and specials stock include popular titles like FIGHTING TRIPLANES and WAFFEN-SS; ITS DIVISIONAL INSIGNIA. The retail service covers not only the comprehensive stocking of new publications but also a huge selection of secondhand items. Customers' wants lists are welcomed, and regular quotations made. Catalogues are published regularly and sent free of charge. Visitors to the showroom at 104 Kilburn Square, London NW6 6PS are always welcome; the Bivouac shop is on the first floor. A call to 01-328-1492 will provide you with opening times and directions.

Stand 38

MASTER DISTRIBUTORS (UK) LTD.

Master Distributors (U.K.) Ltd., have recently introduced the unique MASTER SAW and HOBBY SAW to this country. Manufactured in the British Protectorate of SWAZILAND, the patented SPRING TENSIONING arrangement makes the Bandsaw BLADE virtually unbreakable, despite the most vigorous ill-treatment. SEE THIS DEMONSTRATED.

The MASTER SAW is the senior model, powered by its own ½ h.p. motor, and is mounted on its own Base Housing with a large working plate. Can be placed near to the actual work location provided a source of electricity is available.

The HOBBY SAW is for D.I.Y. and Model Making enthusiasts and is most versatile for many operations. A smaller (and cheaper) version of its senior MASTER SAW, it is powered by any Home Electric Drill having a ¾ in. Chuck or larger and should always be used with the SLOWER SPEED. Recommended MAXIMUM SPEED 900 r.p.m.

Master Distributors have also brought to exhibitions and DIRECT TO THE PUBLIC for the first time a NEW range of general purpose TOOLS manufactured by McGraw-Edison of America.

This Range includes: 10 in. Radial Arm Saw, 2 Speed ¾ in. Drill, 1 Speed ½ in. Drill, 2 Speed Jig Saw, Orbital Sander, 4 in. Belt Sander, Circular Saw 7¼ in., Bench Grinder 5 in., Router, Drill Press.

These are NOT ATTACHMENTS as each has its OWN BUILT IN MOTOR.

Stand 39

PRECISION PETITE LTD.

One again Precision Petite Ltd. are pleased to have the opportunity to present their kits of drills with accessories.

The French manufacturers have improved the latest model with new design switching and chuck collets. The entire range of our products are now available separately. The latest development is a new Flexible Drive approx. 16 inches long and will give a further application for the drill unit allowing very aggravating jobs a pleasure. Precision Petite Ltd. will look forward to old and new friends on their Stand 39. Bryanston Room where demonstrations will be carried all day every day during the Exhibition. Come along and try our products for yourself we wager you will be very impressed.

As a matter of interest our Kits are now used in many very important establishments such as Atomic Energy Research, G.P.C. Research, Ministry of Defence Research, and numerous Electronic Industry research laboratories throughout the U.K. in fact the World.

Stands 40-41

A. T. LEE & CO. LTD.

'The Bottle-Chopper'. The original precision-made tool which adapts bottles and jars into glasses, vases and ashtrays etc. Our continuous demonstrations instruct the correct use and give many practical and decorative ideas. Also available 'Floating Candles' for novel lighting effects.

Distributers of Perma bond the instant adhesive.

Also ''Geode Cracking'' in the Lecture Hall—a chance of beauty and treasure!

Stands 42 & 43

SEAGULL MODEL (G.B.) LTD.

This Company, now well established at the ''M.E.E.'' is continually expanding both its coverage and activities, and this year there will no doubt be more than one new item to delight visitors to the show. Seagull specialises in military and maritime scale models, in addition to carrying the biggest stock anywhere of scale models in paper. On sale will be figures in metal and plastic from 30mm upwards, kits for A.F.V.'s, ship models, and much else in plastic. Aircraft, ships in paper and plasticised paper, many types of buildings from a simple house to large castles in paper in N gauge and OO/HO scales. Also Seagulls own famous range of hand made sable paint brushes. A feature of this stand at each exhibition is the large number of painted figures and dioramas and finished models on display.

Stand 45

ARMS & ARMOUR PRESS

Arms & Armour Press will display—A wide range of military books on tanks, uniforms, aircraft, ships, guns—both published by themselves and other publishers. Recently published books such as FIREPOWER and GERMAN ARMOURED CARS OF WORLD WAR II will be on show, plus the latest titles in the KEY UNIFORM GUIDES.

Arms & Armour Press are always pleased to receive both trade enquiries and enquiries from prospective authors.

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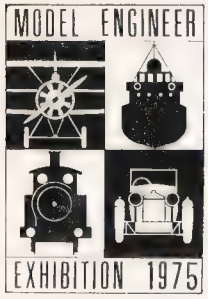


MODEL ENGINEER EXHIBITION 1975

COMPETITION & LOAN ENTRIES

CLASS DUKE OF EDINBURGH

	Type	*Name*
1	The "Gnome" 9 cyl Rotary Aero Engine	L. W. Chenery *(Edgware)*
2	'C' Type Foden 6 ton Steam Wagon	T. Morris *(Wolverhampton)*
3	Stuart 7A Engine	A. Norman *(Warrington)*

CLASS A1. Locomotives — to any L.B.S.C. design 2½ in. and 3½ in. gauge.

	Type	*Name*
1	"Tich" 3½" gauge	W. D. Smith *(Colchester)*
2	5" gauge 4-4-0 loco built to L.B.S.C. "Maid of Kent" design	P. J. Morgan *(Ruislip)*
3	0-4-0 tank engine "Juliet"	F. C. Matthews *(Ruislip, Middx)*
4	3½" gauge L.M.S. Class 5 loco	W. F. Groves *(St. Albans)*
5	"Juliet"	A. Gardner *(Milton Keynes)*
6	S.B. "Tich" with saddle tank	J. S. Dedman *(Cheltenham)*
7	3½" gauge "Tich" large boiler	D. E. Bowerman *(Fulford, Yorks)*
8	"Princess Marina" 3½G	J. A. Elliott *(Billericay, Essex)*

CLASS A. Locomotives. 2½ in. gauge and over.

	Type	*Name*
1	L.B.S.C.'s "Maisie" 3½" gauge	J. Martin *(Thetford, Norfolk)*
2	"Baltic" tank "Remembrance"	A. C. Perryman *(Lancing, Sussex)*
3	5" gauge 0-4-0 loco and tender	A. T. Vince *(High Wycombe)*
4	Caernarvon G.W.R. County 4-6-0	P. A. Hawley *(Derby)*
5	"Jubilee" 2-6-4 tank	C. J. Goulding *(Newport, Mon.)*
6	"Rainhill" in 7¼" gauge	P. Filby *(Humberside, HU20 3XA)*
7	Gresley A4 4-6-2	B. H. Dunster *(Dover)*
8	3½" gauge L.N.E.R. Class L/1	J. C. Bye *(Ipswich)*
9	G.W.R. "Star"	S. W. Baker *(Ringwood, Hants)*
10	Bullied Pacific Spitfire own design	G. R. Wallace-Sims *(Reading, Berks)*

CLASS B. Locomotives. In gauge 1 and 0.

	Type	*Name*
1	G.W.R. Tank Loco 2-6-2	W. V. N. Terry *(Swindon, SN1 2AP)*
2	G.W. Dock Tank Loco 0-4-0 No. 1103	F. E. Hemming *(West Midlands)*

This Exhibition is certified by the Board of Trade for the purpose of Section 51 (2) of the Patents Act, 1949, and of Section 6 (2) of the Registered Designs Act, 1949.

It is necessary that Exhibitors wishing to avail themselves of the protection afforded should make formal application for the grant of a patent or the registration of a design, as the case may be, not later than six months after the opening of the Exhibition.

AWARDS

The cups and medals will be forwarded to the successful competitors as early as possible after the close of the Exhibition, when names have been engraved and diplomas signed.

PRIZE POOL ALLOCATION

Classes attracting six or more entries will enjoy prizes to the value of 1st £5; 2nd £3; 3rd £1. With over 12 entries 1st £7; 2nd £4; 3rd £2 4th £1. Classes under six will have 1st and 2nd only, or at the discretion of the judges may be amalgamated with other classes, or given a discretionary award only. Prizes may take the form of Vouchers, Cash, Replica Trophies (for Challenge Trophy winners, or Championship Trophies.

NATIONAL AWARDS

A number of magnificent trophies have been donated in the past for competition in "Model Engineer" Exhibitions. These cups and trophies are awarded on the occasion of M.E. Exhibitions. Winners hold their trophy for one year only.

In some cases additional prizes in the form of vouchers for goods from firms exhibiting at the Exhibition or advertising in the Souvenir Catalogue may also be awarded.

JUDGING

Judging will take place immediately before the Exhibition opens. Printed results should be available by the day following and will be inserted in catalogues obtained at the show, or will be available on demand by visitors.

*SILVER AND BRONZE MEDALS

Offered in all classes, provided the work is considered by the judges to be of medal standard. The medals will be awarded on the quality of individual models, and not on any placing of the entries in order of merit in a class.
*Silver and bronze coloured.

DIPLOMAS

The judges are empowered to award diplomas in recognition of special merit in all classes at their discretion.

CERTIFICATES

Certificates of entry are given to the owner of every model exhibited in the Competition sections.

THE AVELING-BARFORD TROPHY

Presented by the directors of Aveling-Barford Ltd., for annual award to the best working model traction engine, road roller or steam wagon.

THE BOWYER-LOWE CHALLENGE CUP

Donated by Mr. A. E. Bowyer-Lowe, to be awarded for the best example of craftsmanship and design in the Tools and Workshop Appliances class.

THE BRADBURY-WINTER MEMORIAL CHALLENGE CUP

Donated by Mrs. Bradbury-Winter and a number of friends, to be awarded annually, at the discretion of the judges, for the most outstanding example of amateur mechanical craftsmanship.

THE "BRISTOL" CHALLENGE CUP

Donated by the Bristol Aircraft Company. To be awarded annually for the best model of a "Bristol" aircraft.

THE CREBBIN MEMORIAL CUP

Donated by certain friends of the late Mr. J. C. Crebbin. To be awarded for the best entry in the Locomotive, General Engineering and Mechanically-propelled Road Vehicles Classes.

THE H. V. EVANS TROPHY

Donated by the Thames Shiplovers' Society in honour of its founder, Mr. H. V. Evans. To be awarded annually at the discretion of the judges for research and/or presentation of a ship model.

THE EXIDE AND DRYDEX CHALLENGE CUP

Donated by the Directors of Chloride Batteries Ltd., for annual award. To be awarded at the discretion of the judges to the best model incorporating a battery entered in any section.

THE JOHN GRAY MEMORIAL TROPHY

Donated by the family of the late John Gray for the best Class N model by an entrant under 21.

L.B.S.C. MEMORIAL BOWL COMPETITION

A handsome trophy presented by public subscription by admirers of the late L. "Curly" Lawrence, known throughout the world as L.B.S.C. to be of a locomotive of his design, which will be judged on both appearance and performance.

THE MALTBY TROPHY

Donated by Mr. M. Maltby to be open for competition by Ship Model Societies exhibiting at the Model Engineer Exhibition.

J. N. MASKELYNE MEMORIAL TROPHY

To be awarded, at the discretion of the judges, for the model locomotive, in any scale, which does most to promote fidelity of design.

THE MAZE CHALLENGE CUP

Donated by Sir Frederick Maze, K.C.M.G., K.B.E., to be awarded annually for the best model of a sailing ship (pre-1820) or of an Oriental sailing craft of any period.

THE MODEL RAILWAYS BOWL

Presented by the proprietors of "Model Railways" for the best small gauge railway exhibit.

NEW ZEALAND CUP

Presented by the Model Societies of New Zealand for the best model of a locomotive based on a design by L.B.S.C.

3	L.N.E.R. A3 Pacific "Papyrus"	J. Brierley *(Hove, Sussex)*
4	Brighton Terrier	J. S. Bremner *(Southwick, Sussex)*
5	L.M.S. Royal Scot loco and tender (working model)	F. Wheeler *(Fawkham, Kent)*

CLASS BA. Locomotives. In gauges smaller than 0.

1	G.W.R. King George V	M. J. Smith *(Lambeth, London)*
2	Perspex case containing a selection of scale hand-built models	C. J. Verdon *(Orpington, Kent)*
3	G.W. Saint Class	M. J. Smith *(Lambeth, London)*
4	Ex L.B.S.C. class I-3 Southern No. 2026 4-4-2T	H. R. Heng *(Mossend, Scotland)*
5	Southern Railway 0-8-0 Shunting tank loco Class Z	J. Brierley *(Hove, Sussex)*
6	Hawthorn-Leslie 0-4-0ST "Invincible"	L. S. Vass *(Aldershot, Hants)*
7	5.R. Class B4X 4-4-0 and tender No. 2073	L. S. Vass *(Aldershot, Hants)*
8	Class B4 4-4-0 and tender No. 2044	L. S. Vass *(Aldershot, Hants)*

CLASS C. Rolling Stock and Accessories. Gauge 1 and 0. or larger.

	Type	*Name*
1	7¼" gauge Mineral wagon	A. Burn *(Gosforth NE3 4DX)*

CLASS CA. Rolling Stock and Accessories. Gauges smaller than 0.

	Type	*Name*
1	Pair of fully independently sprung Bogies.	H. Nellist *(Hackney, London)*
2	Private Executive Carriage	Lt. Col. G. M. Edye *(Isle of Man)*

CLASS D. Steam and Motor Ships of any period. (Non-working.)

	Type	*Name*
1	Trawler 'Kandarhar' in Rough	A. L. Bain *(Higham, Kent)*
2	Cutaway model of nuclear powered NS Savaway	J. Brain *(Bristol)*
3	H.M.S. Modeste modified Black Swan class 1952	E. R. Dyke *(Wivenhoe. Essex)*
4	H.M.S. Cossack Waterline Destroyer co Class 1952	E. R. Dyke *(Wivenhoe, Essex)*
5	H.M.S. Hood Battleship 1920/41 waterline	L. Kirby *(Cleckheaton, Yorks)*
6	H.M.S. Marvel "Algerine" class Minesweeper	L. Kirby *(Cleckheaton, Yorks)*
7	Krabbenkutter	D. Mileham *(Ealing, London)*
8	'Queen' class refrigerated cargo liner "Orchidea"	R. L. Packham *(Southampton)*
9	No. '9' Fast Transport (1st class type)	A. L. Raven *(London)*
10	M.V. Arcadian 3400 G.R.T.	S. R. C. Walmsley *(Liverpool)*
11	Norfolk Broads Luxury Cabin Cruiser	G. M. Waugh *(Co. Durham)*

CLASS E. Power Driven Boat Models. (Complete with power plant). Scale or Freelance.

	Type	*Name*
1	U.S.S. Missouri	D. J. Abbott *(Luton, Beds.)*

2	Flower Class Corvette	T. Andrews *(Hounslow Middx)*
3	Semi scale R/C high powered luxury yacht	J. L. Barraclough *(Bradford, Yorks)*
4	"Moorcock" Tug	W. A. Beck *(Crawley, Sussex)*
5	Sea going tug "Campaigner"	K. F. Clover *(Bushey Heath, Herts)*
6	H.M.S. 'Hogue' in dry dock	D. W. J. Burchell *(Sutton Coldfield)*
7	S.T.S. Dilysia 18,000 ton tanker	A. J. Cook *(Luton, Beds.)*
8	Free Lance Tug R/C	J. Gregory *(Ashford, Kent)*
9	"Sir Thomas Brocklebank" Liverpool Pilot Ship	R. S. Foster *(Hartfield, Sussex)*
10	Steam Launch	N. C. Huggett *(Ruislip, Middx)*
11	Fairmile type 'C' M.G.B.	L. H. King *(Hayling Is.)*
12	Steam Driven Trawler	C. W. Noyes *(Radyr, Glam)*
13	H.M.S. Caesar G.A. class Destroyer	W. Nunn *(Battersea, London)*
14	Radio Control Paddle Steamer	I. M. Shaw *(Bolton, Lancs)*
15	Off-Shore Experimental Trimaran	P. Simmonds *(Southampton)*
16	Vosper Thornycroft High Speed Patrol Boat	S. O. Solomon *(Kingston-upon-Thames)*
17	New York Harbour 'Fire Fighter'	R. M. Watts *(Finchley, N3)*
18	Vosper Crash Tender	L. Fastier *(Wimbledon Park)*
19	Kentucky "Bat Wing" River Boat, circa 1900	S. R. Coventry *(Halesworth, Suffolk)*
20	Scharnhorst. Heavy Battle Cruiser	C. Reynolds, *(St. Albans)*
21	'Turbinia' Experimental steam yacht	G. Nicholls, *(Watford)*
22	MV Royal Sovereign Thames Pleasure Ship.	A. Waller, *(Nth Watford)*

CLASS F. Sailing Ships of any period (Non-working).

	Type	*Name*
1	17th Century Sixth Rate	Capt. K. M. Gosling *(Barnham, Sussex)*
2	H.M. Revenue Cruiser Eagle	D. A. Taylor *(Gwent NP6 1QS)*
3	Lugger Colleen Bawn	D. A. Taylor *(Gwent NP6 1QS)*
4	"Enterprise" 28 gun frigate 1774	R. D. Wardale *(Bognor Regis)*
5	English Ship 1590	W. M. Wilson *(Carlisle CA5 4RA)*
6	18th Century Ketch Rigged sloop	H. W. Shoulder *(London E12 6JP)*
7	Wai-p'i-ku crooked stern junk	F. F. Robb *(London SW1)*
8	Nile trader, 6th dynasty	F. F. Robb *(London SW1)*
9	British 18 guns man-of-war brig	L. S. Danilewicz *(Caerns LL53 7HN)*

THE U.S.S.R. CENTRAL MARINE CLUB CHALLENGE CUP

Donated by the Council of Central Marine Club (U.S.S.R.). To be awarded annually to the Club whose exhibit represents the best achievement in marine model engineering.

EDGAR WESTBURY MEMORIAL CHALLENGE TROPHY

Presented by the Society of Model & Experimental Engineers to be awarded at the discretion of the Judges annually for originality and soundness of design in any type of prime mover, working plant in a marine craft, or fidelity to prototype of a working model i.c. engine.

The H.C. WHEAT CHALLENGE CUP

The H. C. Wheat Challenge Cup presented by his Son in memory of H. C. Wheat 1877-1948 to be awarded annually for the best "O" Gauge Locomotive exhibited.

THE WILLIS CHALLENGE CUP

Donated by Mrs. Willis, in memory of her husband, to be awarded annually for the best exhibit in the Hydroplane and Speedboat Section.

CHAMPIONSHIP CUPS

In addition to challenge trophies a number of cups or other trophies are offered to become the permanent property of the winners. Class trophies are offered as follows for the best:

I Locomotive.
II Steam or Motor Vessel.
III Sailing Ship or Yacht.
IV Ship Miniature.
V Mechanically propelled Road Vehicle.
VI General Engineering Exhibit.
VII Aircraft Model.

STUDENTS' CUP

Awarded for any piece of amateur craftsmanship made collectively or individually by a class or member of a class of any school or technical college, or by a full time engineering apprentice. The exhibitor (or exhibitors) must be under the age of 18 on 31 December, 1974.

SCHOOLS' COMPETITION

For boys under 16 who are still at school. Entries can be made individually or collectively provided that the competitors are under 16 on 31 December, 1974.

DUKE OF EDINBURGH CHALLENGE TROPHY

1 A very handsome silver tankard, this trophy shall be known as The Duke of Edinburgh Challenge Trophy, and shall be awarded to the winner of the Championship Award at The Model Engineer Exhibition.

2 The trophy shall remain at all times the property of Model & Allied Publications Ltd.

3 The name of the winner and the date of the year in which the award is made shall be engraved on the Trophy, which may remain, at the discretion of Model & Allied Publications Ltd., in his possession until required for renovation and display at the following Model Engineer Exhibition.

The winner shall be presented with a suitably inscribed tankard for his permanent retention.

4 Any piece of model engineering work shall be eligible for the Championship Award after it has been

awarded, at The Model Engineer Exhibition, a Championship Cup, Gold or Silver Medal or one of the Cups donated by Friends of the Exhibition.

5 No model may be entered more than once.

6 Entry, which shall be free, shall be made on the official Competition Entry Form, Competitors must state on the Entry Form:

(a) that exhibits are their own bonafide work:
(b) any parts or kits which were purchased or were not the outcome of their own work;
(c) that the model has not been structually altered since winning the qualifying award;
(d) the origin of design.

7 Model & Allied Publications Ltd., may, at their sole discretion, vary the Conditions of Entry without notice.

GENERAL CONDITIONS OF ENTRY

1 Each entry shall be made on the offcial form and every question must be answered. Be sure to include the estimated value of your model.
2 All entry forms shall be accompanied by a remittance for the appropriate entry fee.
3 The entrance fee shall be 30p for seniors and 15p for under 16's. (See note.)
4 A junior shall mean a person under 16 years of age on 31 December, 1974.
5 No exhibit which has previously won a bronze medal or higher award at any of the exhibitions promoted by this company shall be accepted for these Competitions. No model may be entered in more than one class.
6 No entry shall be accepted from a professional model maker.
7 The decisions of the judges shall be final.
8 Competitors shall state on the entry form:
(a) That exhibits are their own work and property.
(b) Any parts or kits which were purchased or were not the outcome of their own work.
(c) The origin of the design.
9 Models will be insured for the period during which they are at the Exhibition and in transit to and from the Exhibition, provided they are adequately packed and the instructions regarding their dispatch are correctly observed.
10 Model & Allied Publications Ltd., reserve the right to refuse any entry or model on arrival at the Exhibition and shall not be required to furnish any reason for doing so.
11 Model & Allied Publications Ltd., reserve the exclusive rights to describe and photograph any models entered for competition or display and to make use of any such photograph or descriptions in any way they may think fit.
12 Competitors will be issued with a free non-transferable Competitor's Pass to the Hall during the Exhibition.

COLLECTION

Models may be removed from the Hall between 7 p.m. and 10 p.m. on Saturday, 11 January; 10 a.m. and 4 p.m. on Sunday, 12 January, 1975.

ALL models MUST be removed by 10 a.m. on Monday, 13 January, 1975.

Competitors will be provided with a card authorising collection which MUST be presented.

Models cannot be reclaimed before the end of the Exhibition.

10	Egyptian royal barge	G. Colley *(Stockport)*
11	Sheringham crab boat	S. Bunker *(Southwick, Sussex)*
12	French 24 gun man-of-war	L. S. Danilewicz *(Caerns LL53 7HN)*
13	Ship of the Cinque Ports	J. A. Evans *(Thornton Heath, Surrey)*
14	Mounts Bay Lugger	T. W. Dickey *(Newtownabbey, Co. Antrim)*
15	Kiangsu Trader	T. W. Dickey *(Newtownabbey, Co. Antrim)*
16	Soldiers of France and their Allies — Italy and Sweden	P. Norris *(Greenwich SE10 8DS)*
17	The Golden Hind Galleon	A. Barnard *(Hillingdon Heath UB10 0QA)*
18	Baltimore Clipper, Privateer Schooner 1805 Plank on frame	Christopher Purchase *(Chichester, Sussex)*
19	Mississippi Steam Boat	A. E. Walker *(Barnack, Nr. Stamford)*
20	H.M.S. Prince	A. E. Walker *(Barnack, Nr. Stamford)*

CLASS G. Working Yachts and Sailing Ships.

	Type	*Name*
1	Top sail schooner (Lila Dan)	G. W. Nash *(Harrow, Middx)*
2	Thames sailing barge "Lady Ann"	R. W. Page *(Grays, Essex)*
3	Brigantine "Raven"	R. Glen *(Cardiff)*
4	Schooner	R. B. Glen *(Whitchurch, Cardiff)*

CLASS H. Hydroplanes and Speedboats.

	Type	*Name*
1	Fairey Swordsman	C. Godsalve *(London E13 8QD)*
2	Titan 60	R. Hughes *(Kingston-on-Thames)*
3	Titan 60	J. Lilley *(New Malden)*
4	Titan 60	G. McKenzie *(West Molesey)*
5	Titan 60	M. L. Stokes *(Kingston, Surrey)*
6	Off shore power boat	D. A. Barrett *(Exeter, Devon)*
7	Titan 60	C. Goddard *(Kingston, Surrey)*
8	Titan 60	R. Downing *(West Molesey)*
9	Titan 60	T. J. Basil *(Kingston-on-Thames)*
10	Titan 60	P. Baylis *(Raynes Park SW20 0BX)*
11	"Miss Enfield 2" offshore racer	R. M. Agnew *(Hatfield, Herts)*
12	Circuit racing mono hull with outboard power	A. M. M. Agnew *(Radlett, Herts)*
13	Circuit racing catamaran	A. M. M. and R. M. Agnew *(Radlett, Herts)*
14	"Windy 2"	P. Allen *(Bracknell, Berks)*
15	Offshore power boat	K. Harrison *(Derby DE3 8RT)*

CLASS I. Miniatures. Length of hull not to exceed: 9 in. for $\frac{1}{8}$ in. to 1 ft. scale or larger; 10 in. for 1/16 in. scale; 12 in. for 1/25 in. scale; 15 in. for 1/32 in. scale. No limit for smaller scales.

	Type	*Name*
1	H.M.S. Wilton Minehunter	Eric R. Dyke *(Wivenhoe, Essex)*
2	Roman Merchant ship	E. P. Heriz-Smith *(Tunbridge Wells)*
3	Motor Tug "Brigadier"	R. W. Page *(Essex RM16 4TW)*
4	Steam tub "Cervia"	R. W. Page *(Essex RM16 4TW)*
5	Captain Cook's ship "Endeavour"	J. E. Porter *(Edenbridge, Kent)*
6	H.M.S. Grasshopper 18 gun brig	K. Stuttard *(Birkenhead)*
7	"Golden Hind"	D. Hunnisett *(Aylesbury)*
8	"Le Superbe" 1785 French 74 gun ship	D. Hunnisett *(Aylesbury)*
9	"The Mighty Hood"	R. Chesneau *(Epping, Essex)*
10	Brawenburg Frigate "Berlia" 1675	E. P. Heriz-Smith *(Tunbridge Wells)*
11	S.S.Orontes	A. E. Bonfield *(Leytonstone E11 1DL)*

CLASS J. General Engineering Models (including Stationary and Marine Engines). (working models).

	Type	*Name*
1	Marine engine	H. Buckle
2	Bellis-Morcom triple expansion driving two D.G. Generators in line	G. E. Hartung *(Gravesend, Kent)*
3	Compressor twin single acting cylinders	R. Hobbs *(South Woodford E18)*
4	Stuart Rotative beam engine	J. A. Turner *(High Wycombe)*
5	M.E. Beam engine	Dr. J. F. Nunn *(Northwood)*
6	Stuart No. 9 steam engine	N. Scott *(Milton Keynes)*
7	Stuart Turner No. 9 engine	F. J. Trentham *(Knowle, Solihull)*
8	Steam plant	W. F. Groves *(St. Albans)*
9	Naval Q.F. gun	S. J. Bowles *(London NW10 7HH)*
10	Marine engine	P. Allen *(Bracknell, Berks)*
11	Hydrostatic engine	A. E. Belcher *(London N16 9DB)*
12	Two furnace scotch marine boiler	R. R. May *(Sark, C.I.)*
13	Entablature engine	T. W. Pinnock *(London N20)*
14	Fast steaming marine boiler	A. C. Smith *(Boston, Lincs.)*

CLASS K. Internal Combustion Engines. (working models).

	Type	*Name*
1	Marine Compression Ignition Engine 4.1cc	M. R. Barker *(Northants)*
2	15cc Seal 4 cyl. engine	S. Hamon *(Cambridge)*
3	Westbury Centaur Gas Engine	N. Scott *(Milton Keynes)*
4	Westbury 6cc Atom Minor	G. E. Wolfe *(Purley, Surrey)*

Stand 27

SOCIETY OF MODEL AERONAUTICAL ENGINEERS

Model flying is a sport with built-in satisfaction. Part man-and-machine, part man-versus-the-elements, it is one of the five aviation sports recognised by the Federation Aeronautique Internationale (together with gliding, parachuting, aerobatics and ballooning); its branches require the same stamina, split-second reactions and co-ordination as other sports. Ask anyone who has flown a bout of control-line combat, duelling with a 90 m.p.h. model, trying to cut the streamer towed by an opponent. Ask the free-flight glider competitor, sprinting for ten minutes as he plays his model like a fish on its towline, while feeling for the gentle tug of a thermal. Ask the radio control aerobatic pilot, flying his model through the rigours of the international schedule of manoeuvres, while haw-eyed judges downgrade him for the slightest flight inaccuracies.

The satisfaction comes from the fact that model flyers build their own 'sports equipment', the models with which they compete. Most, in fact, are not 'models' in the sense of being miniature replicas of man-carrying prototypes, but are highly specialised aircraft, designed to excel in one area of performance—speed, for instance, or flight duration. Most competitions are purely objective; it is performance that counts, with you and your model against the elements, and a stopwatch as judge.

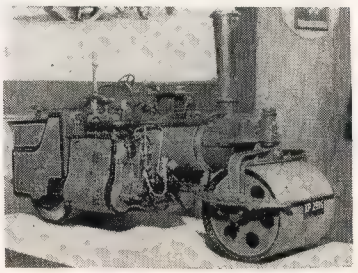
Since 1922 the S.M.A.E. as been responsible for organising model flying in Britain. As well as representing the sport in local authority negotiations for flying sites, it is pressing for recognition by the Sports Council, the body which provides public money for sports and recreation.

The Society sent British teams to the 1974 World Championships for indoor, control-line and scale in the United States and Czechoslovakia. In 1975 radio aerobatics and free-flight duration teams will travel to Switzerland and Bulgaria, but much of the cost will be borne by the team members who represent Britain.

There are 100,000 model flyers in this country. The S.M.A.E. is their voice. Join us and support your sport.

Details from:— S.M.A.E., Dept. MS, 116, Pall Mall, London SW1Y 5EB.

Aveling & Porter Steam Tandem Roller Class MLD, made to one-sixth scale by R. K. Drury of Scarborough, made from original drawings supplied by Aveling-Barford Ltd.



Alice in Wonderland through the Bottleneck — a novel version of the "ship in bottle" model. This is a magnetic working model by R. F. C. Bartley of Westbury-on-Tyrm, Bristol. (Alas a delicate model that although on show will not be seen working.)

Stand 33

SOUTHERN FEDERATION OF MODEL ENGINEERING SOCIETIES

The Southern Federation of Model Engineering Societies; in the present form was founded in 1969. To cater for clubs in the Southern part of the country. Its aims are to encourage all branches of MODEL ENGINEERING and to promote the club aspect of the hobby. A list of clubs and tracks are available at the stand. The FEDERATION has a yearly programme of activities, participating in the M.E. EXHIBITION; two rallies; May 1974 MAIDSTONE Sept. 1974 NORTH LONDON.

This year to be at SOUTHAMPTON in MAY and CHINGFORD in SEPT 1975. A NEWS LETTER is published quarterly reporting on events and general interest, is sent to all members.

The stand at THE M.E. EXHIBITION; which will be staffed by member clubs also a FEDERATION committee member will be present. If you have any questions or wish to join a club we will be very pleased to help you in HOBBY.

CLASS L. Mechanically Propelled Road Vehicles (including tractors). (working models).

	Type	*Name*
1	Allchin Traction Engine "Dulverton"	K. J. Webber *(S. Croydon, Surrey)*
2	Pickfords Transporter	B. Tomkinson *(Birmingham, 28)*
3	Aveling & Porter Steam Tandem Roller class MLD	R. K. Drury *(Scarborough)*
4	"Fowler" Showmans Engine	L. Arnold *(Gosport, Hants)*
5	Sub Miniature Allchin Traction Engine	K. Hobbs *(Eastleigh, Hants)*
6	'0' Gauge American Streetcar	D. G. Newton *(Sittingbourne, Kent)*
7	American Interurban Tramcar	R. H. Whetstone *(Bromsgrove, Worcs.)*
8	'Minnie' Traction Engine	D. H. Wilkinson *(Cricklewood)*

CLASS MA. Diorama. Competition for Diorama composition for any type or size of figures or scenery to be of Military, Naval or Air Force character.

	Type	*Name*
1	Victory' (Waterloo) Diorama	D. Emmerson *(Ipswich, Suffolk)*
2	"Into the mouth of hell rode the six hundred"	R. J. Evans *(Market Harborough)*
3	Sleepytime Afghanistan 1930	J. Firth *(London)*
4	Early Morning Start	K. G. Fisher *(Shepherds Bush)*
5	Last Stand at Gandamak	M. Gane *(Chertsey, Surrey)*
6	Mutiny on the Bounty	A. Garvey *(Roehampton, SW15)*
7	95th Rifles at Waterloo	J. Gillard *(Wood Green, N22 5QB)*
8	France, Early 1944	A. J. Goodfellow *(Stanmore, Middx)*
9	Breakdown, Russia 1944	A. J. Goodfellow *(Stanmore, Middx)*
10	The Battle of the Alamo	B. L. J. Gunn *(High Wycombe, Bucks)*
11	13th Century Samurai	R. Hume *(Northolt, Middx)*
12	Help	S. Jacques *(Edmonton, London)*
13	"After the Charge" The Scots Greys at Waterloo	C. F. Jarvis *(Ramsgate, Kent)*
14	"Hard Pressed" Royal Polish Lancers	C. F. Jarvis *(Ramsgate, Kent)*
15	Charge of the Lancers after the end of the charge of the union brigade	R. J. Jeffery *(Northfleet. Kent)*
16	Panzers Western Desert	S. J. Kemp *(Raynes Park, SW20)*
17	Retreat from Moscow	G. N. Kidman *(Merstham, Surrey)*
18	Sgt. Ewarts capture of the French 42nd Reg. Standard	C. A. Leathers *(Co. Down)*
19	Tiger II	N. Lyon *(W. Wimbledon)*

20	"Blitzkrieg"!	D. Mackenzie *(London)*
21	'Cuckoo'	P. Middleton *(Cambridge)*
22	Loosely based on a painting 'Charge of the Scots Greys'	D. Newton *(Romford, Essex)*
23	"What Are We Doing Here" Ypres — France 1917	J. A. Nicklin *(Sutton Coldfield)*
24	"Return From The Front Line" France 1917	J. A. Nicklin *(Sutton Coldfield)*
25	The Price They Had to Pay	A. Ormerod *(Bridgwater)*
26	Ardennes 1944 Road to Macmedy	M. Pandeli *(London)*
27	M16 Half-Track	D. L. Pavey *(Worthing)*
28	Napoleonic Line Infantry 1807	E. A. Pollard (Nottingham)
29	Stopover Tiger II and Crew at rest	J. E. Pope *(London)*
30	'After the Attack'	D. Rainsford *(Shepton Mallet)*
31	'Report' Desert S.A.S. Jeep	D. Rainsford *(Shepton Mallet)*
32	After the Battle of the Alma	M. T. Ridout *(Rickmansworth)*
33	"The Final Charge"	C. Robinson *(Hayes, Middx)*
34	Miniature Figure	H. S. G. Taylor *(Tunbridge Wells)*
35	"Gribeauval Four-wheel Pattern Field Forge"	J. Stratton *(Crawley, Sussex)*
36	En Route to Stalingrad	S. D. Tame *(Seaford, Sussex)*
37	Sherman MD1 with Jeffires Plough	R. N. Thwaites *(Hucclecote, Glos.)*
38	'Long Live the Emperor'	J. J. Todd *(Basildon, Essex)*
39	SAS Jeep & Scout Car (1942)	N. J. Wareham *(St. Albans, Herts)*
40	Man to Man	S. R. Whitehead *(Northumberland)*
41	Helping Hand	D. A. Wickles *(B.F.P.O 106)*
42	"Spoils of War"	G. Wilson *(Hastings, Sussex)*
43	S.A.S. Jeep	D. A. Ashby *(London)*
44	France, May 1940	J. H. Bell *(Dover. Kent)*
45	German Assault Troops 1940	K. Brown *(Horsham, Sussex)*
46	"Dawn, June 18th"	D. Brown *(Barnehurst, Kent)*
47	Patronising the Enemy	R. L. Brown *(Cambridge)*
48	Stage Coach	D. M. Catley *(Reigate, Surrey)*
49	Akbar Mogul Emperor	D. M. Catley *(Reigate, Surrey)*
50	The Captured Cuckoo Waterloo 1815	D. R. Clark *(Feltham, Middx)*
51	Prisoner of the Vanquished 1815	D. R. Clark *(Feltham Middx)*
52	Voronesh Front 1943-44	I. G. Craig *(Salisbury Wilts)*
53	Panzer Kampwagen II	C. Cully *(Sutton Coldfield)*
54	Surprise Attack	R. Dixon *(Buckhurst Hill)*

Stand 34

THE NORTH LONDON SOCIETY OF MODEL ENGINEERS

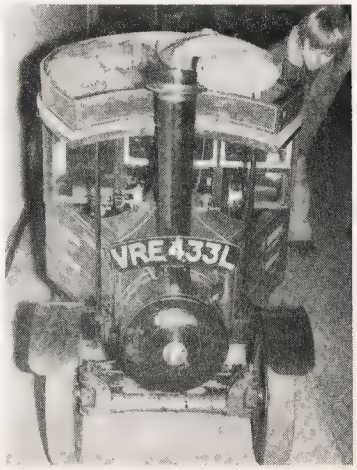
This Society was formed in 1944 and holds regular meetings at its headquarters in Barnet. The Society has approximately 150 members, whose interests range from locomotives, stationary steam, miniature railways, slot car racing and marine.

The Society is fortunate in possessing a track for running the steam locomotives on a half mile circuit, catering for 3½ in. and 5 in. gauge locomotives and a smaller circuit which also accommodates 2½ in. gauge engines. The tracks are located at Colney Heath in rural surroundings with ample car parking facilities, and this site has been the venue for a number of rallies, particularly those for the Southern Federation of Model Engineers.

A number of well known model engineers are members, including contributors to the Model Engineer, and interesting lectures are arranged each month.

Stewards will be on duty throughout the Exhibition to answer any questions on the models displayed, which will be representative of the activities of the Society.

C Type Foden six-ton Steam Wagon by Terry Morris of Wolverhampton, who last year — during the fuel shortage! — had her under steam down Oxford Street "on a handful of coal."



Stand 35

PROTOFOUR SOCIETY

The Protofour Society was inaugurated in 1969 to provide a forum for discerning modellers and to encourage the development of high standards of authenticity, reliability and accuracy in 4 mm railway modelling. Initially our main concern was to promote the benefits of correct scale standards, in relation to rail and wheel profiles, within the hobby. Now this has been firmly established we have turned our development world to virtually every other facet, some of which will be available for inspection on our stand.

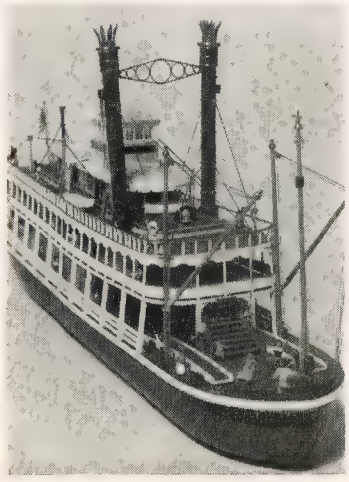
Throughout the country we have established many Area Groups, the home counties being particularly well catered for. The meetings held by our Groups are particularly valuable to the newcomer to railway modelling as it is at these he will learn most about Protofour. By attendance at such meetings, and in conjunction with our publications, any queries he may have will soon be answered.

Once a year we hold a major function in London at which visitors are encouraged to view our work and talk with our demonstrators. For those wishing to attend full details are available at our Stand.

General details of membership of our Society are readily available from:— Dr. L. F. W. Rowe, P4 Society Membership Secretary, 'Blue Haze', 16, Boxwell Park, BODMIN, Cornwall.

55	German 8 ton ½ track	R. Dixon *(Buckhurst Hill)*
56	D+1 'Hedged In'	P. Edmondson *(Old Hatfield, Herts)*
57	L.R.D.G. on Patrol	P. Edmondson *(Old Hatfield, Herts)*
58	M36	P. Edmondson *(Old Hatfield, Herts)*
59	M 13/40 Captured at Tobruk	P. Edmondson *(Old Hatfield, Herts)*
60	Matilda II In Action	P. Edmondson *(Old Hatfield, Herts)*
61	Charge Of The Light Brigade At Balaclava	W. Elliott *(Kingsbury, NW9 8TG)*
62	Band Of Royal Scots Greys	J. Davis *(Preston, Lancs)*
63	Bravest Of The Brave'	R. W. Andrews *(Newhaven, Sussex)*
64	Road to Vigo	R. B. Allen *(Green Lanes, N16)*
65	"The Unseen" Normandy '44	D. Barrie *(Sutton Coldfield B72)*
66	When Taekwondo Strikes	C. Davis *(Shirley, Croydon)*
67	"Retreat to the Rhine"	S. Ellis *(Henley-on-Thames)*
68	Anymore for the Skylark ?	D. Harvey *(Portsmouth, Hants)*
69	Polish Lancers	K. E. Nortrop *(Surbiton KT6 6DA)*
70	M60	M. Wylie *(London SE17 3AS)*
71	Chieftain	P. Wylie *(London SE17 3AS)*
72	Panzekrampp Wagon Tank	M. Wylie *(London SE17 3AS)*
73	"Kaput" P311 with broken track	I. Michael *(Horsham, Sussex)*
74	"Last Defence"	V Shepherd *(London NW10 2RP)*

Ever popular Mississippi Steam Boat by Allan E. Walker of Barnack, Nr. Stamford. Boat is 5 ft. long with a beam 15 in., and stacks 22 in. high.



CLASS MB. Converted Single Figures.

	Type	*Name*
1	Peaceful Lancer	M. Barnes *(London)*
2	U.S. Infantry Staff Sargent 1944	K. Brown *(Horsham, Sussex)*
3	Greek Hoplite	K. Brown *(Horsham, Sussex)*
4	S.S. Panzer Grenadier Waffen	D. H. G. Claxton *(Weymouth, Dorset)*
5	WWII Panzer Grenadier 75/35	D. H. G. Claxton *(Weymouth, Dorset)*
6	Great Plains Indian Hunting Bison	R. V. Hailes *(Stanmore Middx)*
7	Trumpeter Luneburg Hussars 1815	D. M. L. Jones *(London)*
8	The Dreaded Hun 400 AD	S. J. Kemp *(Raynes Park, SW20)*
9	"Russian Musketeer — Winter Uniform 1812"	R. C. Milligan *(Stockport)*
10	Polish Cavalryman 1939	M. Pandeli *(London)*
11	Polish Lancer	D. Reimbold *(Teddington)*

12		J. J. Todd *(Basildon, Essex)*
13	Phoenix Guard Lancer	T. J. Whiting *(Barking, Essex)*
14	Vedette, 13th Dragoon 1854	L. C. Wills *(Weymouth, Dorset)*
15	French Cuirassier 1815	R. W. Andrews *(Newhaven, Sussex)*
16	Red Indian Diorama	S. Ellis *(Henley-on-Thames)*
17	Sea Rover	K. S. Frampton *(Portsmouth, Hants)*
18	Guardacampagna	K. S. Frampton *(Portsmouth, Hants)*
19	Napoleonic Cuirassier	M. D. Harper *(Arnold, Notts.)*
20	U.S. Dragoon 1847	F. W. Hearne *(South Ealing W5)*
21	U.S. Cavalry Meat Hunter	F. W. Hearne *(South Ealing W5)*
22	d'Hautpol (Eylau)	D. Hockey *(London N13 5HQ)*
23	Brunswick Uhlan	T. E. Nortrop *(Surbiton K76 6DA)*
24	25th Cavalry Frontier Force 1908 — Camel Sowar (trooper)	J. D. Wilmshurst *(Maidstone ME15 7TU)*

Yet another wonderful contribution from that indefatigable worker Claude B. Reeve of Hastings. This is a one year bracket clock with perpetual calendar. Works will be displayed separately in a glass case.

CLASS MC. Unconverted or Scratchbuilt Single Figures.

	Type	*Name*
1	Officer 15th Hussars 1815	D. Brown *(Barnehurst, Kent)*
2	Captain Cavalry, Corps d'Elite 1802	K. R. Edgar *(London)*
3	Trooper of Uhlans 1815	R. V. Hailes *(Stanmore, Middx)*
4	French Guard Dragoon Trumpeter	A. L. Hope *(Rochester, Kent)*
5	Dragoon on Horseback	P. D. Isaacs *(Chigwell Row)*
6	Red Army Infantryman 1920	D. M. L. Jones *(Palmers Green)*
7	Trumpeter 1st Hussars c1812	D. M. L. Jones *(Palmers Green)*
8	Officer 5th Hussars c1812	D. M. L. Jones *(Palmers Green)*
9	German Squad Leader	D. G. Kempster *(Bulwell, Nottingham)*
10	Japanese Samurai	D. G. Kempster *(Nottingham)*
11	Officer of Baylors Dragoons 1778	D. G. Kempster *(Nottingham)*
12	Taisho, Japanese Commander 12th-13th c.	C. Miners *(Cheltenham, Glos.)*
13	Vandal Warrior Circa 450 A.D.	A. Pearce *(Denmead, Hants)*
14	Red Cloud Oglala Teton Sioux 1865	E. A. Pollard *(Nottingham)*
15	Trombone Player Chasseurs de Cheval 1806	E. A. Pollard *(Nottingham)*
16	German M.G. Gunner	J. E. Pope *(Tulse Hill, London)*
17	Japanese Commander 12th-13th c.	D. G. Prior *(Swindon, Wilts)*
18	Gentleman c.1550	C. Stubbings *(Basingstoke, Hants)*

Stand 46

INTERNATIONAL PLASTIC MODELLERS' SOCIETY

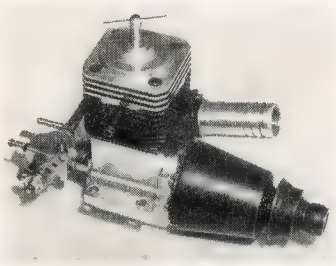
The International Plastic Modellers' Society is a World-wide organisation run by voluntary committees in most countries where people follow the hobby of making plastic kits.

Founded in England at the time plastic construction kits were in their infancy, the object of the Society is to help all members, whatever their interests, to derive more pleasure from their hobby.

In addition to a bi-monthly A4 size 20 page magazine, the Society also has a Technical Advisory service which answers—free of charge—any questions put by members. Many members of the Society are well-known in modelling circles and contribute articles to commercial magazines on subjects within their special fields. Throughout the country branches of the Society hold monthly meetings at which models, modelling techniques and subjects allied to members' interest are discussed. Every year there is a National Competition at which models of all types are judged by various experts and awards are made to each class winner. In addition to this, one model is selected as being the 'Best-in-the-Show' and to the member who constructed this goes the title of 'National Champion'.

Beginners are welcome at all Society functions and are given every encouragement to improve their modelling as well as seek the advice of experienced members. The Society also puts on displays at Air Shows, Army and Navy Open Days, Fetes, Libraries,and other places of interest.

Membership costs £3.50 per year for Seniors and £2.50 for juniors, this fee includes a copy of the National Magazine. A sample magazine and full details can be obtained from:— John Salmon, 'Oakbank' 35, Ceares Green Road, Spencers Wood, Reading, Berks. RG7 1DU.



4.1 cc. Marine Compression Ignition Engine made by M. R. Barker of Wellingborough, mainly on a 1⅛ in. by 6 in. Super Adept lathe. (Some limited use of a vertical miller.)

Magnificent miniature by Captain K. M. Gosling of a 17th century Sixth Rate (circa 1660). Fully working rigging masts held by wedges only plus standing rigging.

19	Cavalier's Party	C. Stubbings *(Basingstoke, Hants)*
20	Lansquenet	D. A. Wickles *(B.F.P.O. 106)*
21	"Dear Mum" French Drummer 1900-15	D. A. Wickles *(B.F.P.O. 106)*
22	Chef of Bataillon 1804-06	S. R. Whitehead *(Northumberland)*
23	Retiarius (Sanderson)	L. C. Wills *(Weymouth, Dorset)*
24	Private light CY 2nd foot guards	R. B. Allen *(Green Lanes N16)*
25	German Knight	C. Davis *(Croydon, Surrey)*
26	U.S. Military Policemen, Europe 1944, mounted on motorcycle	F. W. Hearne *(South Ealing W5)*
27	Rifle Officer 1815	D. Hockey *(London N13 5HQ)*
28	Polish Lancer — Napoleonic mounted figure	B. T. Riches *(Anerley SE20)*
29	Mounted Guard Chasseur Napoleonic mounted figure	B. T. Riches *(Anerley SE20)*
30	Emperor Napoleon mounted	B. T. Riches *(Anerley SE20)*
31	Carabineer General	K. E. Nortrop *(Surbiton K76 6DA)*

CLASS MD. Artillery. Competition for exhibits consisting of field pieces and equipment with or without accompanying figures to any scale.

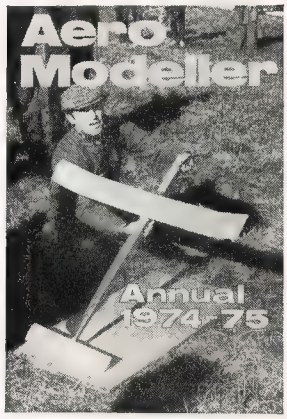
	Type	*Name*
1	12 pounder Minden guns 1759 32 pounder Howitzer 1862	Cap. D. Campbell *(Staverton, Devon)*
2	Tiger Mark I	R. Carne *(London SE23)*
3	French Napoleonic field forge	G. J. Carter *(Maidstone Kent)*
4	9.2" railway gun Mk. 1A modified	J. Dorman *(Edmonton N18 1HR)*
5	Armstrong rifled breech loading 12 pounder	K. Gibbs *(Lydiard Millicent)*
6	American civil war battery	M. Goodall *(Sherwood)*
7	Prussian 12 pounder position gun and crew	M. Hole *(Cumbria CA1 1HQ)*
8	German tank "Tiger I"	J. W Hyder *(Luton)*
9	Oil leak	S. Jacques *(Edmonton N18 2MH)*
10	Roman Artillery 100 A.D.	K. Jardine *(Nottingham)*
11	Panzer Jager Russia 1941	D. Mackenzie *(London SW2 3AP)*
12	Tiger I	G. Napper *(Hants. GU34 5PF)*
13	Sherman M4 e'	G. Napper *(Hants. GU34 5PF)*
14	Bombard "Mons Meg"	D. Robinson *(Stockport)*
15	Ships gun on Gibraltar depression carriage	D. Robinson *(Stockport)*
16	Artificial Armour	C. Davis *(Croydon Surrey)*

	Type	*Name*
1	Plains Indians — Buffalo and wolf clan dance	D. M. Catley *(Reigate, Surrey)*
2	Winter Hunting	D. M. Catley *(Reigate, Surrey)*
3	Plains Indian	D. Cunnington *(Birmingham 33)*
4	Sioux Chief	P. Evans *(Cheshire WA7 2JT)*
5	Araparho brave 1870	P. Evans *(Cheshire WA7 2JT)*
6	Midatsa dog dancer	A. A. Godfrey *(Shoreham-by-Sea)*
7	Osage Warrior	M. B. Howard *(Hayes, Middx)*
8	Cheyenne Dog Dancer	M. B. Howard *(Hayes, Middx)*
9	A Day to Die	M. B. Howard *(Hayes, Middx)*
10	Sioux warrior	R. Hume *(NNortholt, Middx)*
11	Arapahoe Braves	S. J. Kemp *(London SW20)*
12	Indian brave holding Sioux war banner	D. G. Kempster *(Nottingham)*
13	Sioux warrior on horseback	T. Lobley *(Gainsborough)*
14	Buffalo hunt and Indian ponies fight	C. R. MacDonald *(Colchester, Essex)*
15	Scout and Brave	H. Ranger *(Guildford, Surrey)*
16	Dying brave	J. Ranger *(Guildford, Surrey)*
17	Mounted Indians	B. W. Shields *(Cleveland TS13 4SF)*
18	Mandam Chief	A. A. Godfrey *(Shoreham-by-Sea)*
19	Hostile Apache	F. W. Hearne *(S. Ealing W5)*

CLASS N. Tools and Workshop Appliances.

	Type	*Name*
1	Centre finder	J. Baker *(Sevenoaks, Kent)*
2	Carbide fly cutter	J. Baker *(Sevenoaks, Kent)*
3	Boring Head	J. Baker *(Seveonaks, Kent)*
4	Tap wrench	J. Baker *(Sevenoaks, Kent)*
5	Westbury milling machine	J. F. Rolfe & E. Cave *(Watford, Herts.)*
6	Graduated machine vice	W. C. J. Truscott *(Perranporth)*
7	Workshop	G. Davies *(Bourne End, Bucks.)*
8	Tailstock & Crosslide Drilling etc., taper turning attachment	S. H. Willetts *(Nr. Lydney, Glos.)*
9	Carpenters Tools	W· Freestone Bayes *(London)*
10	Four Jaw Chuck	D. R. J. Wilkins *(St. Albans)*

AEROMODELLER ANNUAL 1974-75



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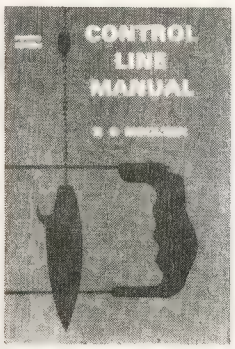
CONTROL-LINE MANUAL

R. G. MOULTON



Main chapter headings: Why Control Line, Basic, U-Control Basic Monoline; Basic Flight Control; Learning to Fly; Aerobatics, Speed, Team Racing; Combat; Carrier, Cargo and Endurance; Scale Models, Jet. The Engine in Control Line; Towards the Indestructible; Looking after the Lines; Variations on the Theme. Plus appendix.
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CLASS O. Engineering Scale Models (Non-working).

	Type	*Name*
1	Ancient Greek steam engine	G. W. Langham *(Rosyth, Fife)*
2	1914-18 'Old Bill' Bus	R. C. Lightheart *(Welling, Kent)*
3	1973 Castrol dragster	N. R. Cleveland *(Berks RG10 8AX)*

CLASS P. Scenic and Representation Models (including Architecture).

	Type	*Name*
1	Autumn Threshing	M. R. Martin *(Weymouth, Dorset)*

CLASS Q. Horological, Scientific & Optical Apparatus.

	Type	*Name*
1	Battery powered Hipp type electric wall clock	J. F. Lowndes *(Blackpool)*
2	One year bracket clock with perpetual calendar	C. B. Reeve *(Hastings TN34 2DZ)*
3	Small ebonised bracket clock with ting-tang chimes	J. C. Stevens *(Ealing W5)*
4	17th Century lantern clock	J. M. Wild *(Sheffield S8 8BP)*
5	Skeleton Clock	M. A. J. Hutt *(Milton Keynes)*
6	Eight-day Skeleton Clock	E. Isaacs *(St. Albans, Herts)*
7	Eight-day Regulator Clock	E. Isaacs *(St. Albans, Herts)*

CLASS R. General Craftsmanship — not otherwise classified.

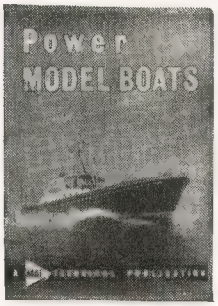
	Type	*Name*
1	Historic Buildings 'Christmas Steps, Bristol'	R. F. C. Bartley *(Westbury-on-Trym)*
2	"Man inside Bottle" Bottler's Nightmare	R. F. C. Bartley *(Westbury-on-Trym)*
3	12 Miniature models of ships, scenes etc., in glass miniature bottles	R. F. C. Bartley *(Westbury-on-Trym)*
4	'Alice in Wonderland' — "Through the bottle neck". A merry-go-round in a bottle	R. F. C. Bartley *(Westbury-on-Trym)*
5	Side drum of the Argyll and Sutherland Highlanders	B. L. H. Baxter *(Bishops Stortford)*
6	Broad wheeled Sussex Waggon	P. Blake *(Corringham SS17 9EA)*
7	Thornycroft 'J' type lorry with mobile workshop body	J. Dorman *(Edmonton N18 1HR)*
8	Hesketh 308-1 formula 1 car	S. E. P. Jerrett *(London SW15)*
9	Lady's fancy brooch	H. May *(London NW3)*
10	1970 Lotus 72 formula 1 Grand Prix racing car	R. B. McGowan *(London SW13 0BJ)*
11	Cotswold Bow Waggon	H. Talbot *(Quenington)*
12	Space Craft	J. E. Pope *(London SW2 21B)*
13	East Anglian Farm Waggon	J. D. Thompson
14	South-east Cornish Waggon	J. D. Thompson *(Fleet, Hampshire)*
15	Dennis motor fire engine — 1914	G. M. Waugh *(Sunderland SR4 9RQ)*
16	Excalibur SSK car	G. M. Waugh *(Sunderland SR4 9RQ)*
17	Strad : Violin	J. K. Adams *(London NW11 8DY)*

18	W.W.II. Zundapp M/C combination	F. W. Hearne *(London W5)*
19	International Motor Museum	David Ball *(Wembley, Middx)*

CLASS S. Junior Section. For any type of model or mechanical work (except military figures) by a junior under the age of 16 by 31st December, 1974.

	Type	*Name*
1	Powered motor launch	W. Ainsworth *(London E16)*
2	15cc 4 stroke petrol engine	N. Bright *(Brighton, Sussex)*
3	Lockheed C130K Hercules	C. J. Burchell *(Sutton Coldfield)*
4	Aircraft — Supermarine Spitfire	J. S. Champion *(West Wickham)*
5	Tank WWII M3 LEE Mark I	J. S. Champion *(West Wickham)*
6	Tank WWII Jagd-Panther	J. S. Champion *(West Wickham)*
7	Tank WWII Panzerkampfwagen Panther-G	J. S. Champion *(West Wickham)*
8	Tower Windmill	J. R. Clements *(Sussex RH10 3RH)*
9	"Refueling" A PZWG	M. Davis *(Surrey CR0 8RE)*
10	The ring goes south	G. Downer *(London SW19)*
11	Container ship	M. Duncan *(London SE9 4SL)*
12	Dalek Victory	O. J. Gilkes *(Brighton 5)*
13	Diorama	S. Goodson *(Walton-on-Thames)*
14	"Panzer at rest"	S. F. Griggs *(Horsham, Sussex)*
15	Stuart Turner 10H steam engine	M. Hornsey *(Ruislip, Middx)*
16	Junkers JU 87	N. S. W. Jones *(Sutton Coldfield)*
17	Sternwheel paddlesteamer	R. A. Knapp *(London W11 2EQ)*
18	Fast patrol launch	K. Leebrooke *(Catford SE6)*
19	Rommel's Rod	K. Leebrooke *(Catford SE6)*
20	F6F-5 Hellcat	P. R. Mills *(Windsor)*
21	"Big Hauler"	C. Miners *(Cheltenham)*
22	Satan, A2 sailplane	S. M. Richardson *(Loxwood, Sussex)*
23	SAAB s35E Praken	S. Ray *(Bourne PE10 0UJ)*
24	15cc 4-stroke petrol engine	A. L. Smith *(Sussex BN9 7QM)*
25	SAS Jeep	C. Stubbings *(Basingstoke RG21 2QP)*
26	Honda '750' four motor cycle	P. Stoddart *(Four Oaks)*
27	'Keilkraft' Outlaw	M. J. K. Tuck *(London NW9 0JF)*
28	Stuart 10 vertical	J. Turney *(Oxted, Surrey)*

12 POWER MODEL BOATS



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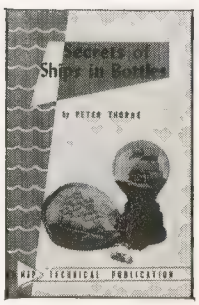
SECRETS OF SHIPS IN BOTTLES



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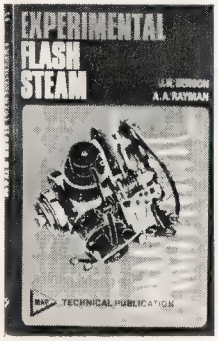

A subject of great interest in these days of energy crisis, the authors give attention to flash steam as a motive power for transport and to steam cars in general, but primary concentration is devoted to model uses in boats and hydroplanes. The book contains the essentials of all that has been published and developed during the past 60 years in the model world. Fully illustrated with line drawings and plates.

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30	B.N. Islander	D. White *(Holland-on-Sea, Essex)*
31	Cherokee Arrow II	D. White *(Holland-on-Sea)*
32	A collection of 1/72 scale aircraft	P. White *(Holland-on-Sea)*
33	Wellington BIII	P. White *(Holland-on-Sea)*
34	D H.C. Beaver	A. W. Wright *(Sutton Coldfield)*
35	Richard I	C. A. Wright *(Sutton Coldfield)*
36	Westland Lysander	T. J. Hubble *(Greenford WB6 8QZ)*
37	Hawker Siddley Harrier	T. J. Hubble *(Greenford WB6 8QZ)*
38	Fairy Flycatcher	T. J. Hubble *(Greenford WB6 8QZ)*
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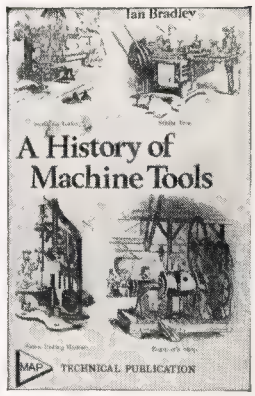
40	Diorama "Recovery"	R. Pinchard *(St. Ives Hunts)*
41	Diorama "Rest House"	R. Pinchard *(St. Ives Hunts)*
42	Spadd XIII	T. Walker *(Cookham Rise SL6 9HW)*
43	Mill Engine	J. Lehmac *(London N.W.11).*
44	Blazar Tug	D. Berger *(London)*
45	Whale Catcher R2.	S. Birley *(Hendon N.W.4).*
46	Douglas C–47B Aero Industries Tech. Inst.	G. N. Hulme *(Hayes, Middx.)*
47	Douglas Dakota 3 Silver Clty	G. N. Hulme *(Hayes, Middx.)*
48	Douglas C—47A Aer Lingus	G. N. Huime *(Hayes, Middx.)*
49	Stuart "Sun"Engine with reversing	S. A. Bullman *(Wickford)*

CLASS SA. Romford & Dagenham Boys' Club.

	Type	*Name*
1	Marblehead Yacht	W. J. Walker *(Dagenham, Essex)*
2	Castle Class Frigate	K. Worker *(Romford, Essex)*
3	Miniature M.T.B.	A. Worker *(Romford, Essex)*
4	Tug Empire Jester	D. Chilver *(Ilford, Essex)*
5	W class Destroyer	I. Stevens *(Romford, Essex)*
6	Destroyer	P. Colgrove *(Romford, Essex)*
7	Pharo's Lighthouse Alexandria BC	H. Starling *(Romford, Essex)*

8	Statue of Liberty	S. Richards (Miss) *(Dagenham, Essex)*
9	Stuart Royal Yacht	Susan Richards *(Romford, Essex)*
10	Portsmouth Dockyard Scene	W. Jiggins & D. Gordon & S. Suttle *(Romford)*
11	Lavendar Class Frigate	P. D. Bailey *(Romford, Essex)*
12	Destroy	G. Bleakiey *(Dagenham, Essex)*
13	Blue Star Line	F. R. Guffick *(Romford, Essex)*
14	H.M.S. Malaya 1939 period	F. R. Guffick *(Romford, Essex)*
15	Frigate	B. J. Dove *(Romford, Essex)*
16	Frigate	S. J. Snell *(Romford, Essex)*
17	H.M.S. Belfast	T. R. Saunders *(Dagenham, Essex)*
18	Royal Yacht Britannia	P. Williams *(Chadwell Heath)*
19	Laughing Cavalier	A. Suttle *(Dagenham, Essex)*
20	Runabout and Water Skier	A. Williams *(Chadwell Heath)*
21	The Lovers	W. Jiggins *(Dagenham, Essex)*
22	H.M.S. Destroyer	P. W. Stevens *(Chadwell Heath)*
23	H.M.S. Victory	F. M. Guffick (Mrs) *(Romford, Essex)*
24	H.M.S. Repulse	D. Davenport, S. Suttle & W. Jiggins *(Dagenham)*
25	Barnett class Lifeboat 52 foot	F. R. Guffick *(Romford, Essex)*
26	H.M.S. Suffolk	S. Warwick *(Romford, Essex)*
27	Alf Everard Coaster — Barge	J. Richards *(Dagenham, Essex)*
28	Cabin Cruiser	D. J. Davenport *(East Ham, London)*
29	H.M.S. Nelson	W. Jiggins *(Dagenham, Essex)*
30	Duke of York Battleship	D. Gordon *(Dagenham, Essex)*
31	Landing, at June & Gold Beach Head, D. Day 1	Joint effort by boys R&D Model Boat Club *(Romford, Essex)*
32	H.M.S. Revenge Battleship	S. Suttle *(Dagenham, Essex)*
33	L.S.T. Landing Craft	P. Morrad *(Romford, Essex)*
34	Inshore Rescue Dinghy & S class Submarine	A. Orr *(Dagenham, Essex)*
35	H.M.S. Ark Royal	S. Suttle, W. Jiggins & D. Gordon *(Romford)*
36	River class Frigate	M. Chilver *(Ilford, Essex)*
37	Noahs Ark	M. Chilver *(Ilford, Essex)*

A HISTORY OF MACHINE TOOLS



It is surprising that not much is seen, except perhaps in isolated museums, of the beautiful machines produced by clockmakers and others in the 18th century. Whilst it has been possible to cover the period from 1700 to 1900 in some detail it must be appreciated that technology tends to gather momentum, especially under the influence of military activity, so the advances made from the turn of the century until the present day must necessarily be an abridged résumé of progress in this field. To do otherwise would involve the production of a further book of some complexity, of value probably to only a narrow spectrum of reader. It is hoped, however, that this work may provide an outline that will stimulate interest in the subject.

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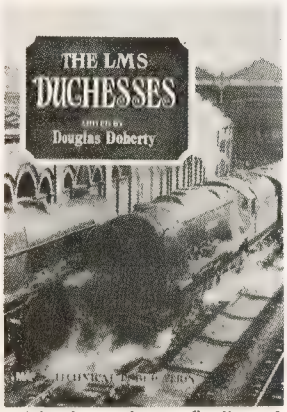

No claim is made to finality of the story of the L.M.S. Duchesses with this book. The objective is to bring pleasure to the reader by seeking to recreate certain features of the life and times of these locomotives via words drawings and pictures. Contents: Design and Construction by E. A. Langridge; A Performance Evaluation by John Powell; A Driver Reminisces by Peter Johnson and; A Critical Appreciation by W. A. Tuplin.
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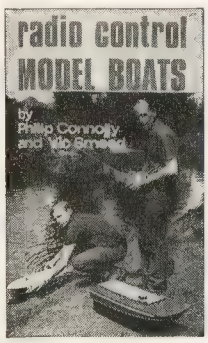

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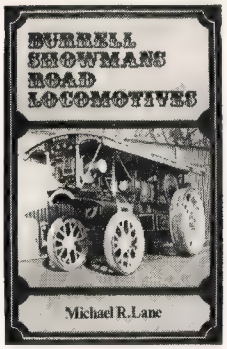

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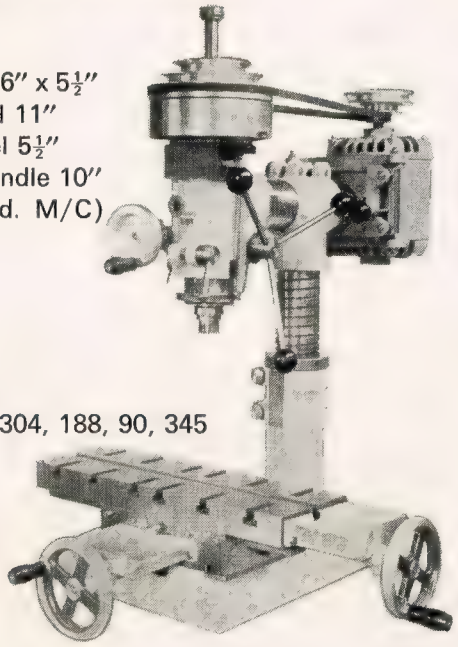

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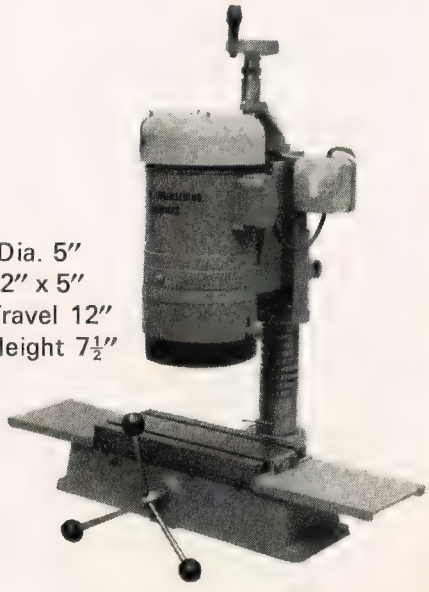

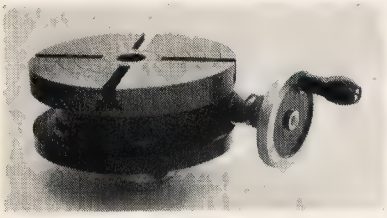

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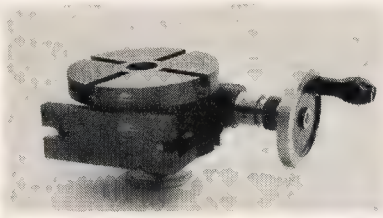

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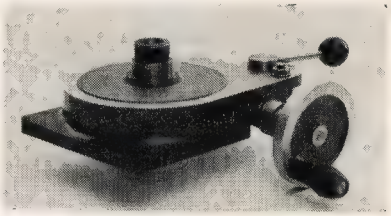

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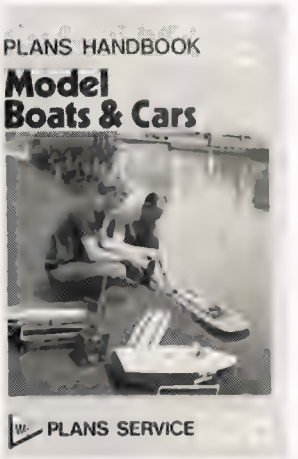

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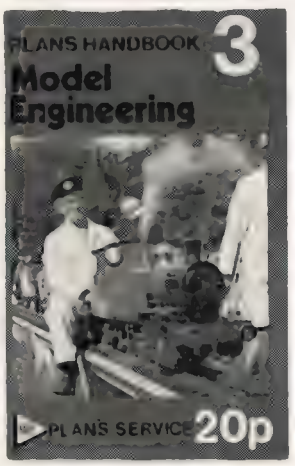

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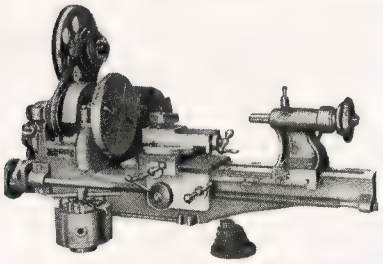

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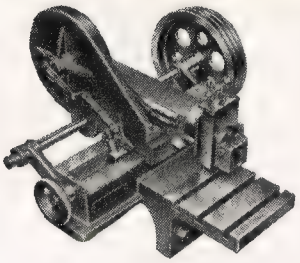

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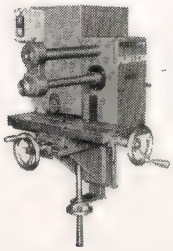

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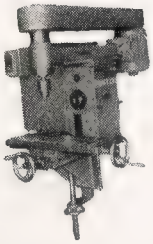

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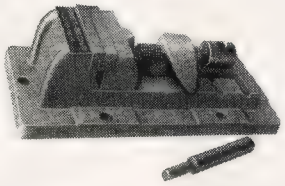

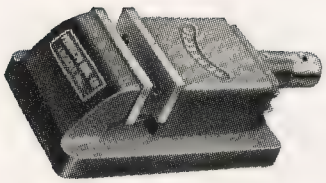

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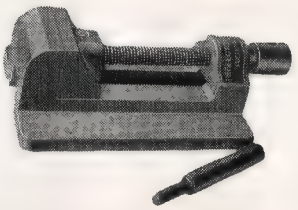

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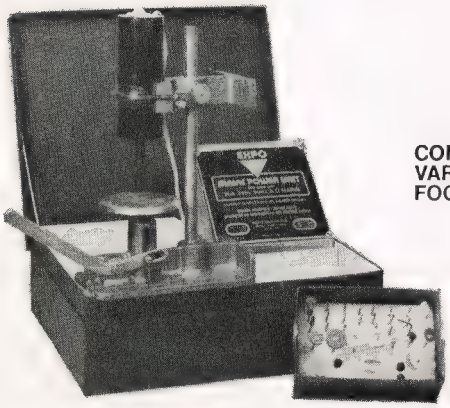

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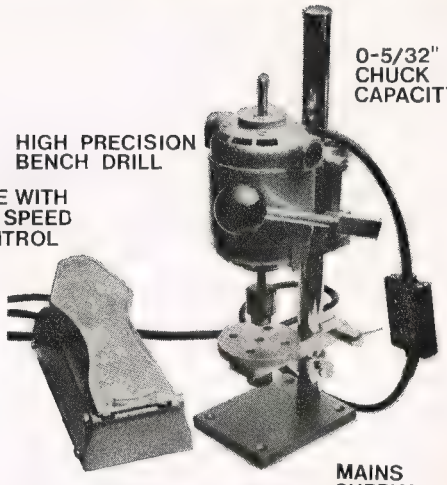

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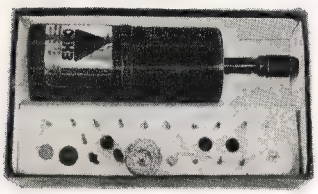

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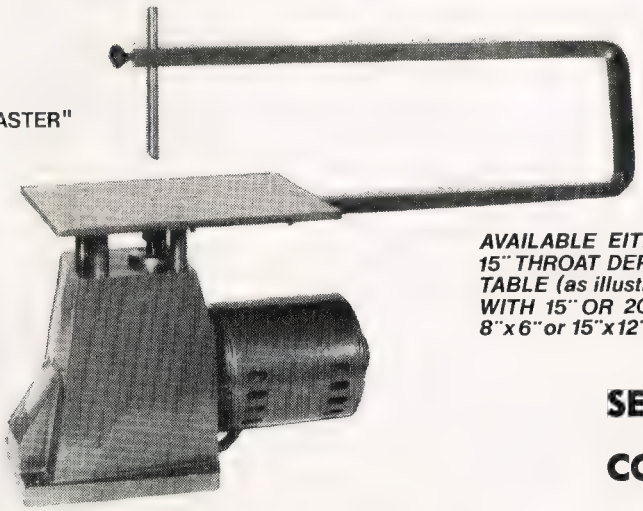

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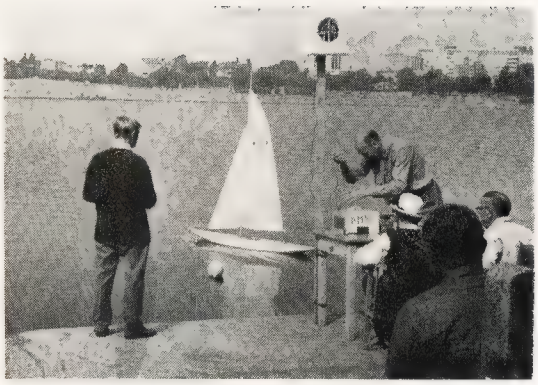
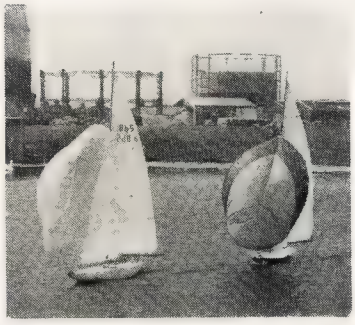
MODEL YACHTING IN 1975



Above, an RA class yacht setting out at Poole M.Y.C. water. Poole club was one of the first in the world to race radio yachts regularly.

Below, two A class boats on the run, with spinnakers set, at Gosport. So far spinnakers have not proved practical for radio yachts.



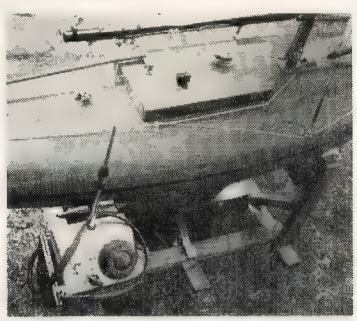
The recognition in October 1974 of the Model Yachting Association by the Central Council of Physical Recreation set the seal on a season which had seen possibly the biggest advances ever in the hobby or—as it can now officially term itself—sport of model yachting. The major item was the final and massive arrival of radio-controlled yachts, for although a small handful of enthusiasts has sailed by radio for over twenty years, acceptance of this form of sailing had never been widely achieved. Two years ago there were probably five clubs where R/C was considered usual, and even a year ago the first glimmerings of interest were only faintly stirring in established clubs. Now radio yachts are sailed by over half the clubs in the M.Y.A., some six new clubs have been formed and others are in the offing, and a second National Championship for R/C yachts has been instituted, attracting considerable support.

This second Championship, for RM (R/C Marblehead) class yachts, was sailed for the first time with Guildford M.Y.C. as hosts and drew 27 entries from all over England. Therein lies the answer, for it was the formal recognition by the M.Y.A. of smaller R/C yacht classes which initiated the rapid growth. Many of the new enthusiasts were power boat or aircraft modellers who had found operating of their models becoming more inconvenient as noise problems forced them further afield, some were dinghy sailors who had become intrigued by seeing models at the National Dinghy Exhibition or the International Boat Show, and others were vane yachtsmen who discovered that many lakes unsuitable for vane racing were entirely usable by radio yachts. There were other factors which contributed, of course, but primarily the climate was right and, once the M.Y.A. had made its decision, the ball was rolling.

Nor, surprisingly perhaps, has the growth in R/C yachting diminished interest in vane sailing, if anything, the reverse is the case. Clubs are increasing in membership, new boats are being built by the score, and race entries are higher than ever before. The outstanding example is undoubtedly the smallest class, the 36 in. Restricted, written off as virtually dead three or four years ago, but attracting 29 entries in the 1974 National Championship. Model yachting, in other words, is booming, and booming to the extent that manufacturers are beginning to take notice. Easier availability of fittings, hulls, materials, and even kits will increase interest further, and we may well be seeing the re-emergence of model yachting as a challenger for the most popular form of working model.

The Model Yachting Association thus enters 1975 as a strong and growing organisation, and 1975 is its most ambitious year yet. Apart from national championships for 10-rater, Marblehead, 36R, 6 metre, RA, and RM classes, three major international meetings will take place in consecutive weeks at the end of July and the beginning of August. First is a World Championship for Marblehead yachts at Fleetwood, July 20-25, followed by a World Championship for A class yachts, which will also incorporate the National Championship in this class, also at Fleetwood, July 27-Aug. 2. Then, immediately following, Aug. 3-9, at Gosport is the first major international radio control yacht regatta, for R10R and RM yachts. Notification of entries has already been received from Belgium, Canada, France, Germany, Japan, and U.S.A., plus of course Britain, and the final entry list is likely

The control area of an RA yacht. A normal servo operates the rudder and the sails are sheeted by means of a rotary winch.



to be well in excess of 100 boats. It promises to be a very exciting meeting.

For those unfamiliar with yacht classes, the smallest is the 36 in., where basically length is limited to 36 in., beam to 9 in., overall depth deck to keel 11 in., and displacement 12 lbs. Sail area is unlimited.

Numerically the strongest class in most countries is the Marblehead, length 50 in., sail area maximum 800 sq. ins., and very little other restriction. These boats vary from 13-22 lbs., are extremely portable, and give exciting sailing.

Not often seen today is the 6-metre, about 54 ins. long, 30 lbs., about 1100 sq. ins. of sail, but built to a rather complex rule which is probably the principal cause of the class losing ground to simpler yachts.

The fastest yachts are the 10-raters, the rule for which relates the two main speed factors, waterline length and sail area, so that an increase in one results in a decrease of the other. These boats nowadays tend to be around 7 ft. in length with about 1100 sq. ins. of sail and displacements of 22-26 lbs.

Largest of all are the A class, averaging about 7 ft. in length, weighing 50-60 lbs. and carrying 1500 sq .ins. of sail. This rule is so framed that boats of 35 or 80 lbs. can be built, but over the whole range performance is evened out, so that even after fifty years experience of the rule, there is still no one set of dimensions which will guarantee superiority.

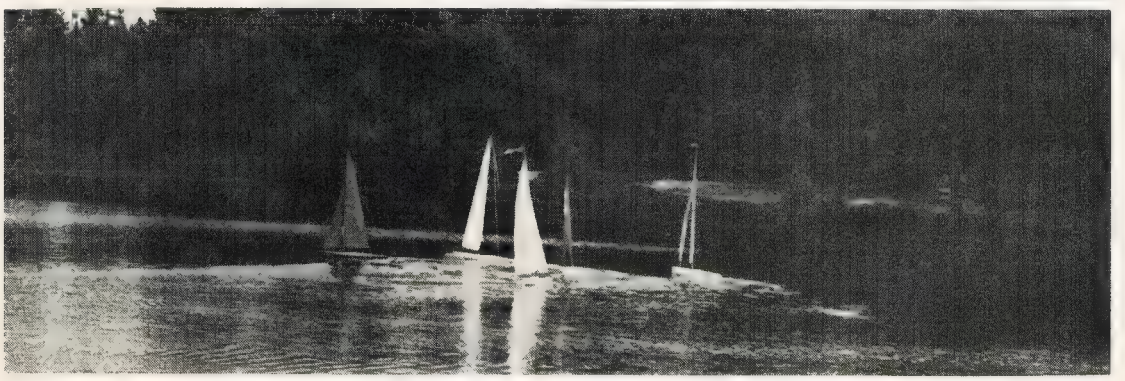
Each class is also capable of being sailed with radio control, in which case it is identified by the prefix R - R36r, RM, R6m, R10r, and RA.

A list of clubs, with their sailing waters and classes sailed, can be obtained by sending a stamped and self-addressed foolscap envelope to the Hon. Sec. M.Y.A., R. Gardner, 6 Rowner Close, Rowner, Gosport, Hants. Rating rules, sailing rules, etc., including those for radio, are available from the Hon. Publications Secretary, M.Y.A., V. E. Smeed, P.O. Box 35, Hemel Hempstead, Herts. HP1 1EE, and a list will be sent on receipt of a S.A.E.

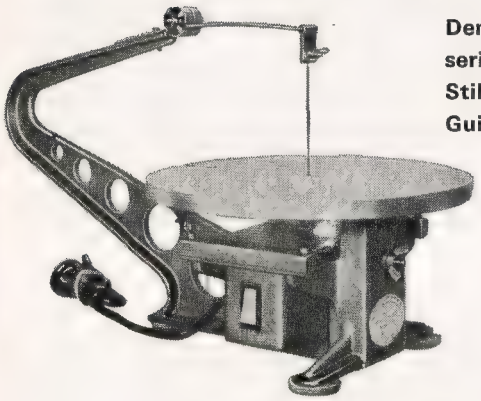
Above: A class yachts racing in the 1974 British Open Championships. The near boat's vane is being adjusted by its skipper.

Right: A German A boat sailing a Dutch one, neck and neck in a stiff breeze, at the 1974 International Championship at Gosport.

Below: A clutch of radio Marbleheads rounding a buoy (by bow of second boat) in the 1974 RM Championships at Elstead. Tight and exciting races like this are normal!



WAY ABOVE EVERYONE ELSE.....



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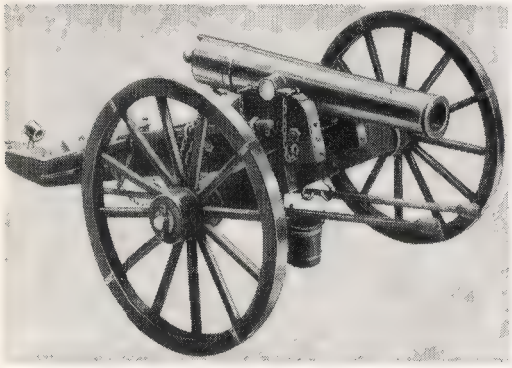

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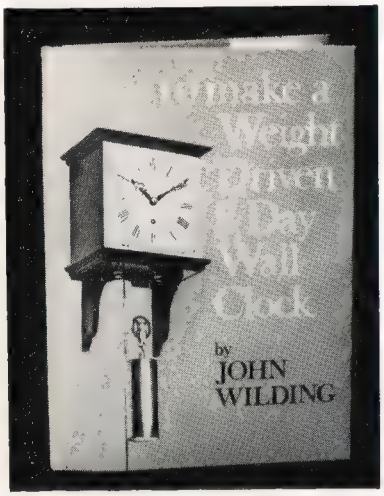

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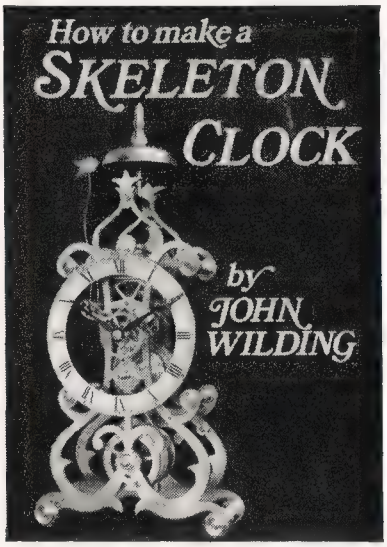

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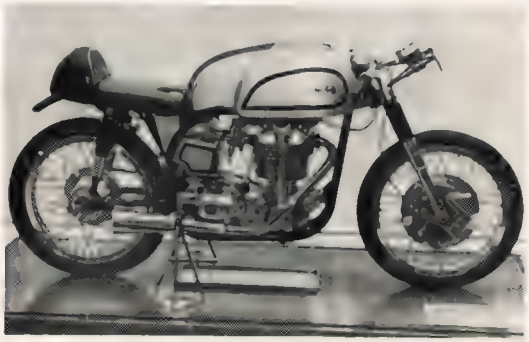
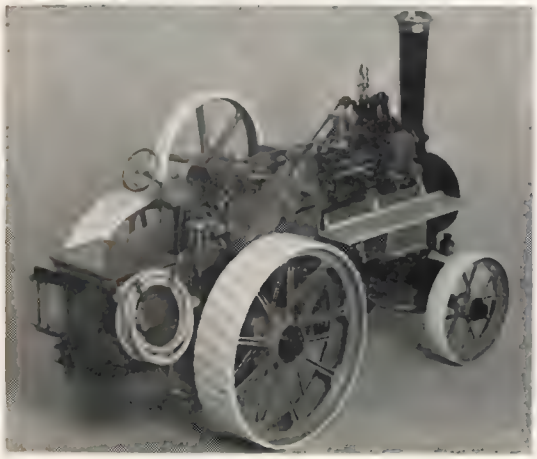
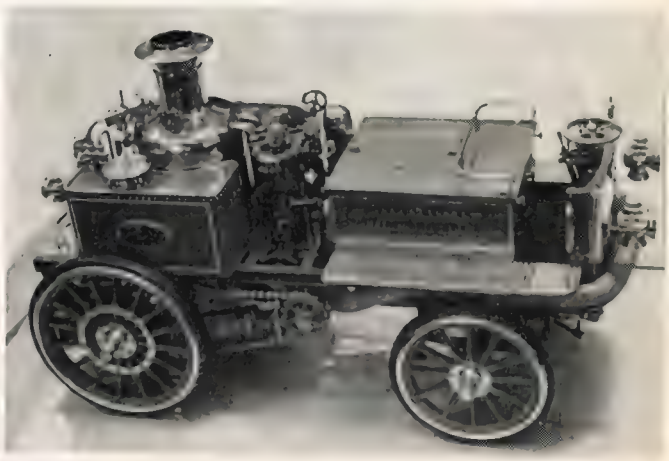
Winners from past years







Top left: Model roundabout by the late W. H. Heather in its first form. Appropriate riders and working musical steam organ were later added.

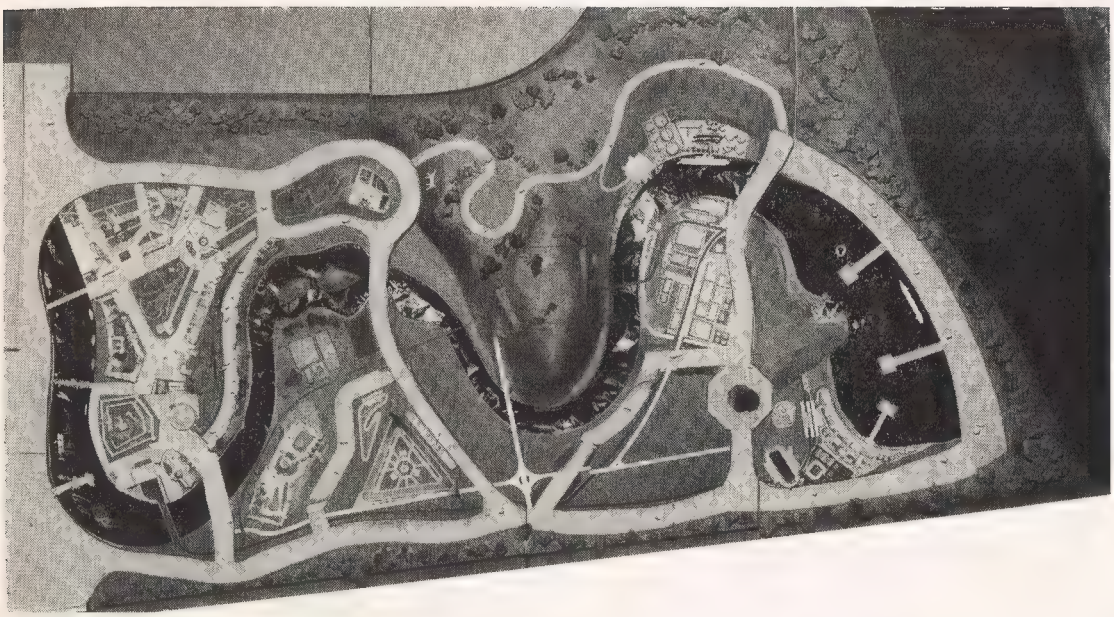
Upper left: Trinity House Pilot Vessel by Morley Hancock of Sidmouth.

Upper right: A fine scale model of a Manx Norton 30M which won a Bronze Medal for B. Hares.

Lower left: This model traction engine was built by Ministry of Defence Apprentices, Christchurch, Hants., and won Students' Cup.

Lower right: Finely detailed model fire engine by Miss Cherry Hinds (Silver Medallist).

Bottom left: London County Council tramcar built by the late F. J. Roche and a Silver Medal winner in 1950 (Scale $\frac{3}{4}$ in. to 1 ft.).



THE BEST OF BRITAIN IN MINIATURE

Modelmakers throughout the country are invited to play a part in the creation of Tucktonia—a 3¾ acre site which will be landscaped to produce the best of Britain in miniature. This very ambitious project is sited at Tuckton Park (hence the name!) near Bournemouth and will be part of an area which already boasts a golf course, leisure complex and restaurant. On this model area will be erected to a scale of 1/24th (½ in. to the foot) famous buildings such as Windsor Castle, Tower of London and the like: on a river winding through will sail great ships of the past and in the harbour liners and tea clippers will be tied up. In the miniature streets transport of all kinds will be seen, and throngs of people all to scale. Nearby the miniature airport will display its quota of aircraft, and the train will be at the station to pick up its tiny passengers.

Much of the work must necessarily be done professionally, but individuals and club groups will be invited to study the specifications and submit their ideas for models they would be prepared to make. On receiving approval suitable models will be commissioned on a basis of a cash advance to cover estimated cost of materials. Models will then be inspected on completion and a short list will go forward for final appraisal. Those actually accepted for Tucktonia will be offered further prize awards.

Cash prizes in each category will range from £200 to £50 (double in architectural class).

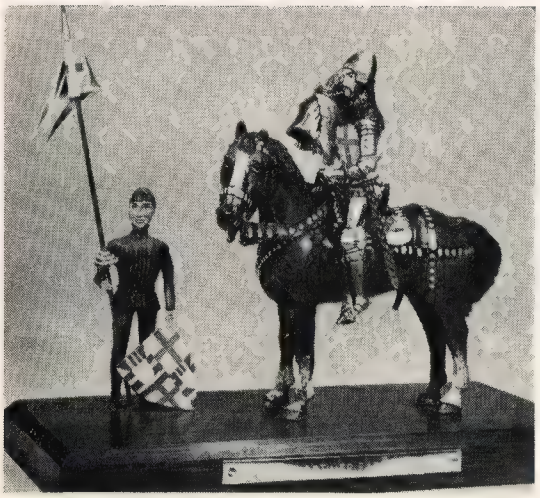
Model and Allied Publications are happy to be associated with this scheme, and will be placing the Committee Room at the disposal of the Tucktonia organisation to display a block model of the scheme, and to provide leaflets setting out requirements in more detail. We shall then be agreeing competition rules and publishing them in our magazines—probably the February issues—when the whole range of requirements and prize—lists will be decided . . . there will be opportunities not only to have models on permanent display but also to pick up prizes totalling over £1,000 **and** have materials paid for!

Suggestions for our various model interests could be: a famous building, say Whitehall—when the mounted guards could be produced by Military Modelling to Scale Modelling's edifice. Cutty Sark or some such craft could be Model Boats effort—or perhaps the model club out sailing with models of models! The airport presents no limitations . . . there is immense scope. Point to remember! The greater part of the show will be outdoors so that lasting nature of materials is a must!

Final note for do-gooders! Six Open Days annually will devote their proceeds to selected charities. Be sure and see the model at the M.E.!

Above: Block model of Tucktonia, showing river, circling township and ending at harbour. Airport sports ground, racetracks can be noted.

Below : A picture from Maturadam — the long established Dutch model town near The Hague where scale is 1/25.



Edward Mortimer, Earl of March, in metal in 90 mm. scale with his page; the manufacturers are Lippett and Son, relative newcomers to the military figure world but with a rapidly expanding range—again a wide cross section of historic periods is covered.

Greenwood and Ball Limited have concentrated, among other periods, on Medieval Knights; these are just two of their recent 54 mm. scale releases in the Lasset range.

Alec Gee makes a

Tour of Inspection

Reviewing Troops on offer at the "M.E.E."

Looking back on it, 1974 has been a curious year with its somewhat false start in the shape of a 3 day week and the still-continuing aftermath which it brought with it. Back in dark January and February things looked at their blackest, for modellers in particular; hobby magazines, the enthusiast's final link with his modelling interest when prices of kits, accessories and books etc., begin to soar, were savagely hit. Those which were produced on time appeared as thin utility shadows of their former selves—and indeed, several never appeared at all, suspending their publication until print trade troubles and power blackouts had abated.

Hit as severely as any was **Military Modelling** magazine which appeared shakily with a "Power Crisis" cover in February but was 75% recovered by the March issue and back to full strength by the April number. Despite this, however, during those early months of the year, things looked pretty uncertain for the model-making hobbies—there was even talk of a plastics shortage, you may remember, which scared kit manufacturers only a little more than it did modellers themselves!

But what makes 1974, upon reflection, such a curious sort of year is the surprisingly little damage inflicted on the whole military modelling industry and its survival of the worst economic crises for years, almost completely unscathed. Admittedly, prices have risen on certain model products despite attempts by manufacturers to trim overheads and their own production costs; in the field of modelling literature in particular, prices of books and magazines have of necessity been increased due to the rapidly rising costs of paper, printing, and binding. There's a few pence too on the prices of plastic kits and a halfpenny here and there on wargames figures and the like but, from our vantage point on **Military Modelling** magazine whose monthly circulation figures never faltered once during the lean days of January and February (circulation figures which are still going up towards the 50,000 mark!) it really looks as though the hobby has easily weathered this particular economic storm.

It's all been due to three factors, not the least of which is the tremendous snowballing popularity of model soldiers, A.F.V.'s wargames and all other aspects of militaria in miniature, a popularity that has continued and continues to increase every month. Secondly, the reaction of manufacturers has done much to ease what might easily have become a desparate situation. Where prices have had to be increased this has been effected fairly and realistically; no one has taken advantage of the situation and, as a result, the modelling public's confidence in the trade has possibly increased rather than diminished. Thirdly, it is members of this last and most important of all category—you the modeller and visitor to our Exhibition this year—who, with their constant enthusiasm and interest have ensured, not only that our hobby survives, but that it continues to grow and flourish.

Just what sort of Military modelling year then was 1974? The simple answer is surprisingly a good one with just as many, if not more new releases from the trade as in 1973. Since most of them will be on show at this Exhibition, it might be helpful to the visitor to describe some of the more interesting so that he can keep an eye out for them on the trade and society stands as he moves about the Seymour and adjoining halls. Since space is limited, let's concentrate this year on figures.

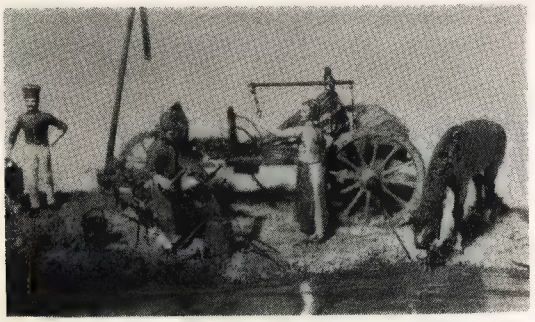
The movement seems to have been one of diversification of subject (see our notes "A Milk-cart on the Mantelpiece" elsewhere in this Handbook) with many manufacturers, although not all, exploring new fields and not necessarily limiting their attentions purely on military subjects. A discussion of this trend appears on other pages of this publication so here let us look at less unconventional releases. Knights of medieval times and Napoleonic subjects from the Lasset series have occupied

Greenwood and Ball (Stand 31) for much of the year and, in addition to these, have come Press Gang and Tavern characters in the Sanderson ranges from the same manufacturer; they'll be on display on the G & B stand together with this company's vast 'Garrison' 25 mm range of wargaming figures. **Historex**, the famous French plastic kit manufacturers and something of pioneers in modern military modelling, have also chosen to produce something out of the ordinary as one of their new models for 1974. It's a rather beautiful set for a French Napoleonic field forge in 54 mm and there are artificer figures to accompany it. Another new Historex release (which, like the forge, can be viewed on Historex Agents, Dover stand in the main hall) is a set of parts for a Lanciers de Berg.

Hinchliffe Models Limited (stands 20/21) too, despite the general economy difficulties have been as busy as ever in 1974. The superlative 75 mm range of Napoleonic figures by Ray Lamb has been much increased and, excitingly, now includes British subjects (27th and 71st Infantrymen) to accompany the already large French range thus making this series even more attractive to the collector. New artillery pieces have also come from Hinchliffe recently in the shape of Parrot and Gatling guns and smaller scale wargames figure manufacture has continued as strongly as ever. Their stand in the main hall is well worth a visit—and wargamers and younger battlegamers will find something pretty exciting on display and hitherto unpublished!

Series 77 (Stand 10) have, if anything, been the busiest in the months between last year's Exhibition and this. Their superb suit of armour and medieval weapons models in the Trophy of Arms kits have been joined by a reissue of 54mm Stage 1 (including Life Guards 1660-1973, Landsknecht and a Saxon Guard Officer of 1900) which are also now available in kit form—a departure for this Company—and there has even been a larger scale bust kit for Napoleon. Their very latest Stage 14, seven Prussian Heavy Cavalry foot figures of 1900 in 77 mm scale can be viewed, as well as all the rest, including those beautiful camel mounted figures from the French Camel Corps Stage on their attractive main hall stand.

Lippett and Son (Stand 49) are relative newcomers to the large scale military figure world. Their rapidly growing range of 90 mm figures features subjects drawn from a wide historic cross-section with medieval knights and men at arms both foot and mounted and immense models for Alexander the Great on his warhorse, Beauchamp, Earl of Warwick, Ralph Lord Basset of Drayton, the Earl of March, Edmund Mortimer and others. Pay them a visit.



The new 54 mm. scale French Napoleonic field forge set by Historex complete with artificer, smith working at anvil and an assistant smith. This one was built by Cesare Milani, a regular contributor to "Military Modelling" magazine.

The Old Guard (Stand 11) have had a busy year which was disrupted by a move north to Northumberland. Nevertheless, products have continued to come onto the market and, now that David Winter and his team are established at New Hope Design with their own manufacturing facilities, the balance between imported U.S. parent company figures and those manufactured in this country will swing more and more to home produced items.

A British Officer of 27th Infantry Regiment 1815, a recent addition to the 75 mm range by Hinchliffe which has been enlarging over the year. The sculptor is Ray Lamb and these new English figures join an already established big series of French subjects in the range.

All their latest releases are on show—plus some brand new figures in a new range from Malcolm Watson.

On to the wargames orientated manufacturers and a look at **Miniature Figurines** (Stand 12). They must surely, by sheer weight of numbers alone, have been among the busiest over the last twelve months! The 25 mm ranges—and they must now cover **every** conceivable period in history—have multiplied with tremendous activity on the English Civil War, Ancients, Napoleonic, American Civil War, and U.S. War of Independence fronts and it's also nice to record that they are completely remaking (a vast improvement) their earlier French Napoleonic series. Manufacture of Mythical Earth, Science Fiction and Space War figures continues at a hot pace and they can all be found (if not all on display certainly available for viewing upon request—there are simply so many of them!) on the Mini Figs stand.

Starcast Miniatures (Stand 24) have specialised in the 'micro' scale wargames equipment field throughout the past year and visitors will be able to examine their superb and rapidly expanding range of super-detailed 1/300 scale metal micro armour models this year. A vast A.F.V. type collection is covered including tanks guns and trucks etc., from Britain, the U.S.A., Germany, and Russia.

Skytrex Ltd's (Stand 50) should, this year, represent the wargamer's Mecca. They are

An example of the highly "different" 25 mm scale wargames figures now produced by Miniature Figurines Limited whose ranges include subjects from virtually every nation and every conceivable period in history; these are 'space' or science fiction figures.

showing everything connected with battlegames including wargames rules for a wide variety of periods, accessories in the shape of dice of all types, wargame books by a long list of acknowledged expert authors and wargames Research Group games 'Sea Strike', 'Decline and Fall' etc. In addition to this they can show visitors their own immense ranges of 1/300th and 1/200th scale micro armour—they have over 150 individual items in the 1/300th series for a start!

Day-long demonstrations of all the wargaming equipment mentioned above (and much more) take place throughout the Exhibition on the balcony over the main entrance; visitors will be able to see in detail just how wargames in all periods are played by an enthusiastic assembly of battle gaming societies. It represents a unique opportunity for the un-initiated to see what it is all about and an ideal discussion area for experts.

Most military modellers, at some time or another, have found the need for what was once considered a luxury tool, the modellers' electric drill and on stand 39 **Precision Petite Limited** are demonstrating the famous battery or transformer powered instrument from France which has found popularity with so many enthusiasts.

No guided tour of the Exhibition would be complete without reference to stands occupied by members of the retail trade and of these, **Wall Models Limited** (Stand 8) should provide a fairly typical cross-section of what is currently available. Wall carry as much plastic kits and A.F.V. model merchandise as they do figures and proprietor Eric Knowles and his wife, both enthusiasts, will be on hand to show visitors new products. Similarly, **Model Hobby Consortium** (Stands 14/15) and **Beatties of London** (Stands 16, 17, 18) are the people to visit for plastic kits while, for the written word, **Bivouac Books Limited** (Stand 37) and **Arms and Armour Press** (Stand 45) are both carrying a wide range of books and periodicals of specific interest to military modellers. There are so many new titles coming on to the market in the military field at the present time that it is almost impossible to keep track of all the new releases; a browse through the stocks of either of these two exhibitors should prove a worthwhile exercise and we can guarantee that you will find titles on subjects which you hadn't realised were even published!

Another retailer, but perhaps of a more specialised nature than the others, is **Seagull Model (G.B.) Limited** on stands 42/43. Proprietor Alex Campbell has an uncanny knack of tracking down and importing quantities of the less usual and rarely seen foreign military models and in recent years his trade stand at our Exhibition has contained many true collectors' items in addition to the more usual top quality British ranges.

Finally, and as a complete contrast to the 'trade' aspect of the show, visitors must make a point of visiting the Society Stands of which the **British Model Soldier Society** (Stand 32) will probably be first port of call; on show (if previous years are anything to go by) will be a breath-taking collection of high quality military models both figures and A.F.V. produced by Society members. In addition, there will be modelling demonstrations by top modellers and Society members on hand at all times to answer your questions. Like the B.M.S.S. stand the **International Plastic Modellers Society** on Stand 46 is also the source of unlimited inspiration. Visit them both and study the models on display; their quality is such that Exhibition visitors who have never before made a military model in their lives go straight home to make a start!

Stage 14, Series 77's latest batch of 77mm metal figures; they are for heavy Prussian cavalry, circa 1900.

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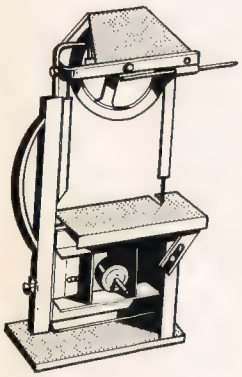

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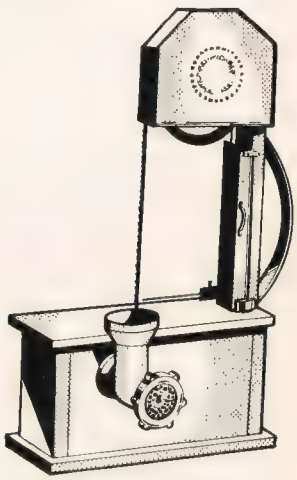

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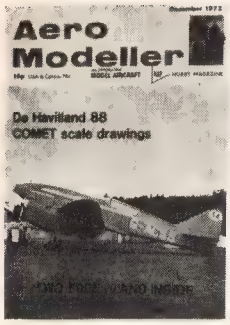

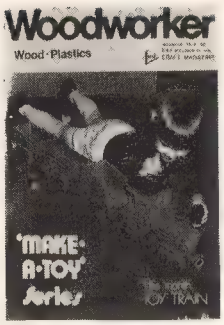

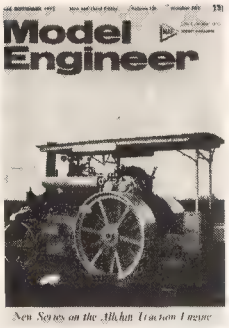

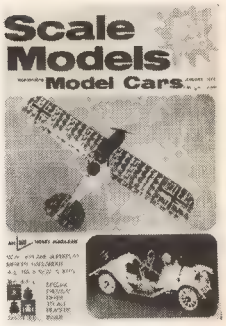

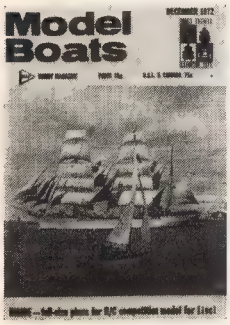

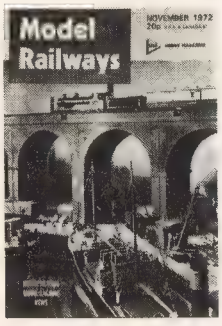

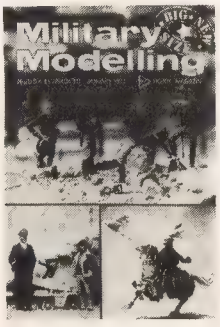

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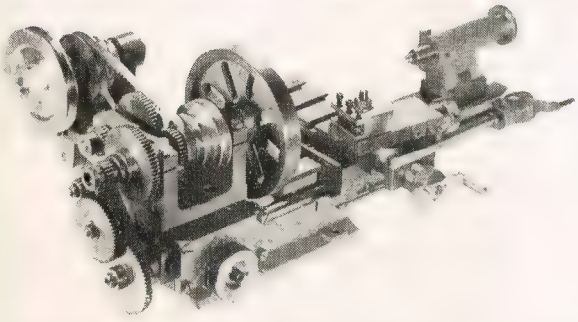

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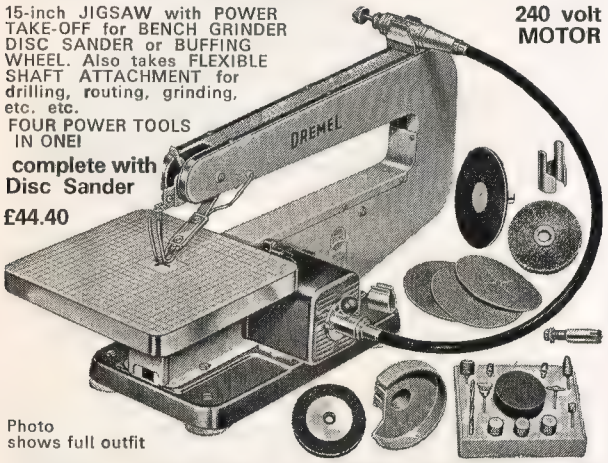

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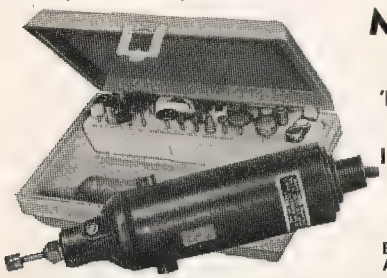

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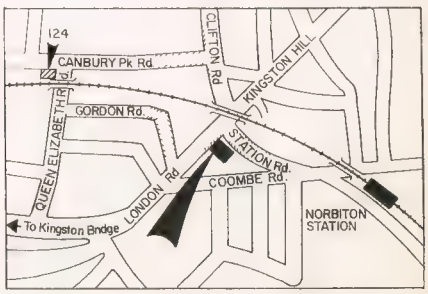

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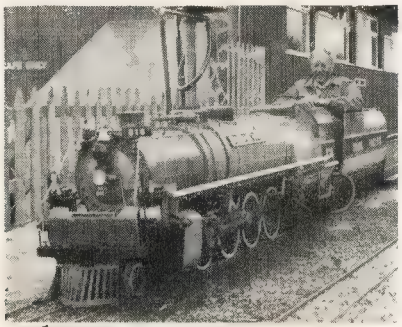

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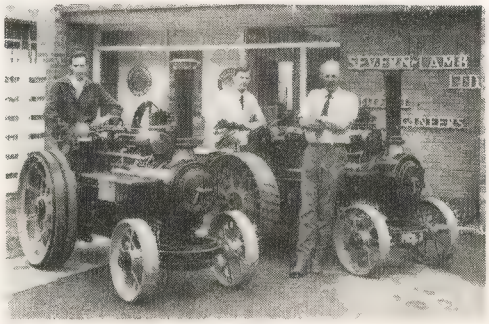

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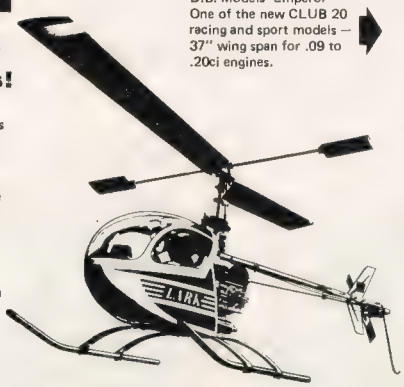

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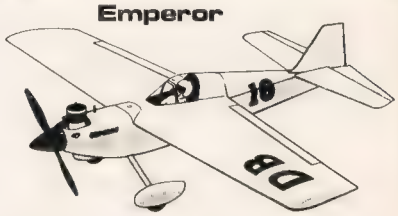

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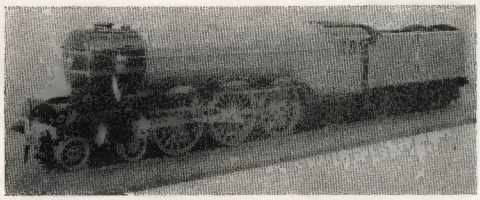

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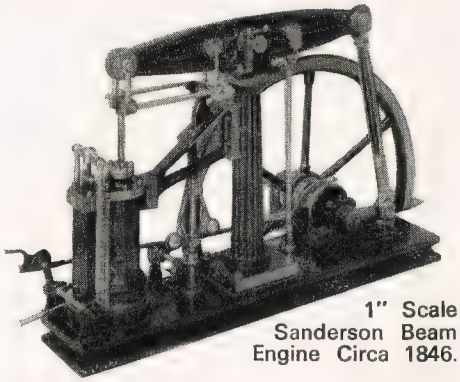

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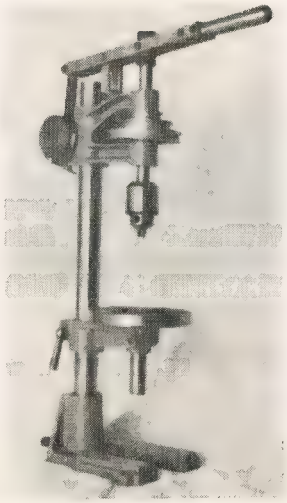

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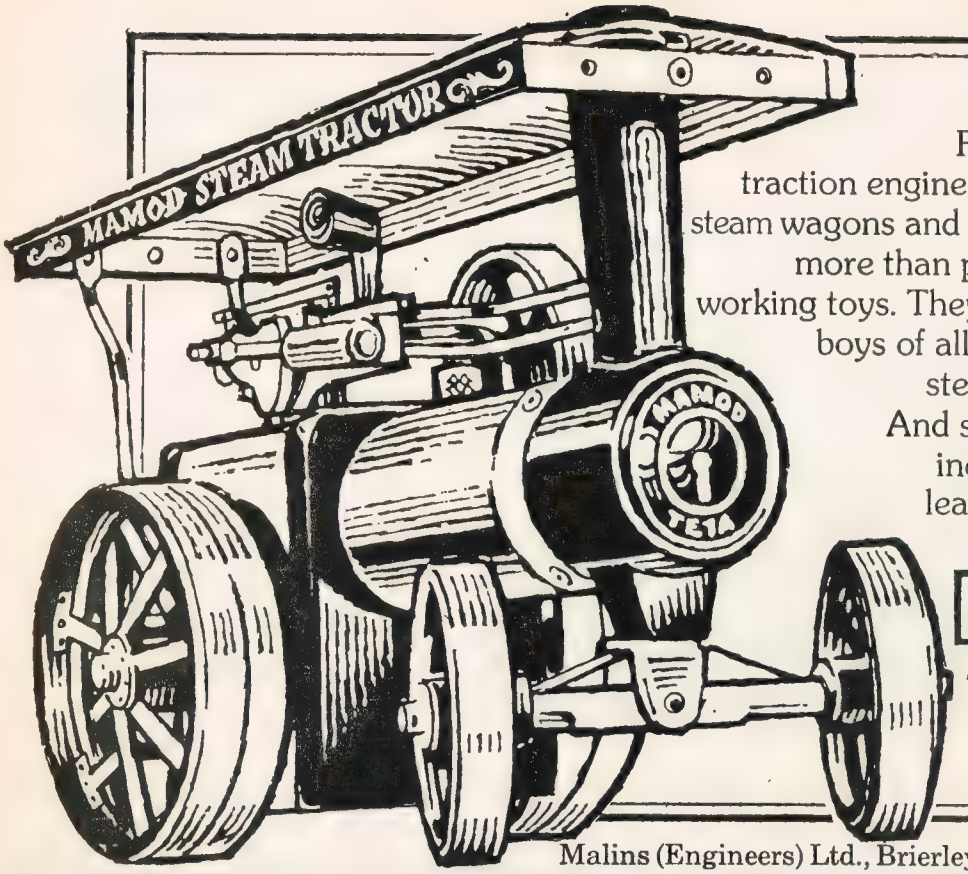

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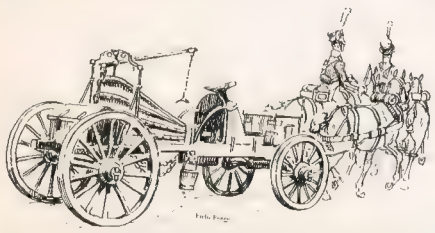

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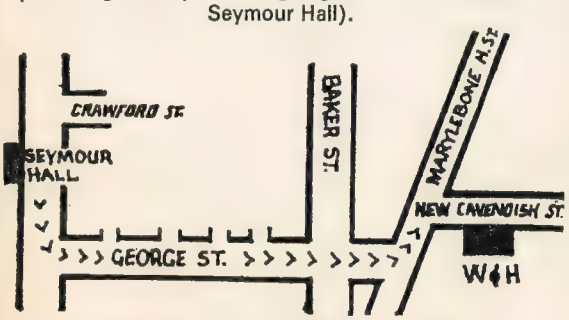

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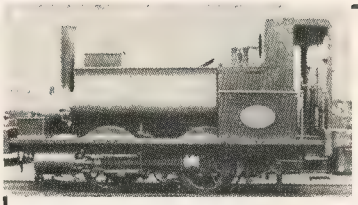

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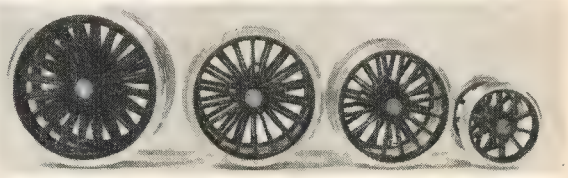

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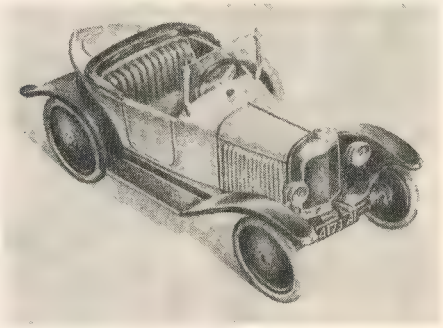

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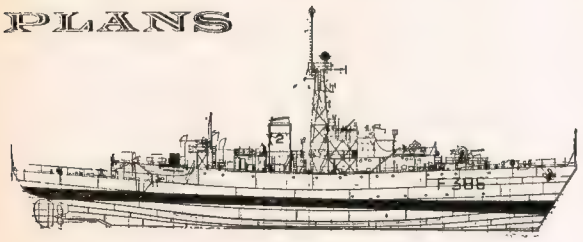

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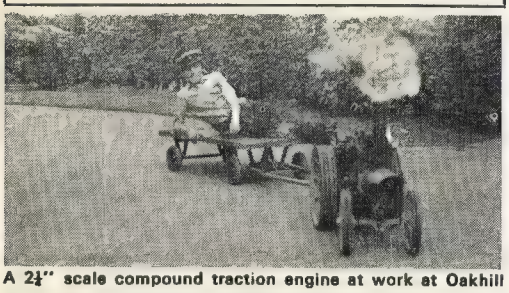

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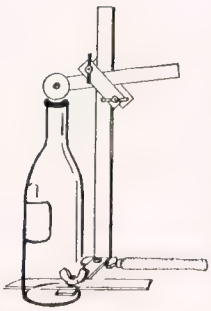

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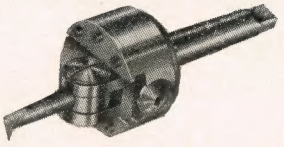

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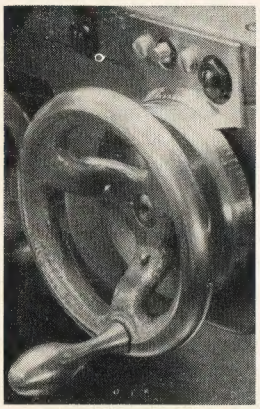

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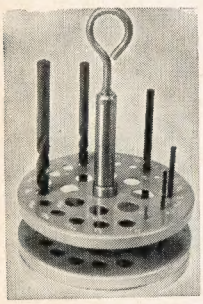

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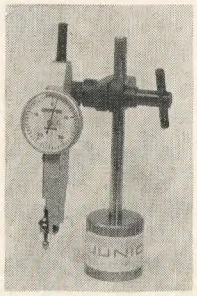

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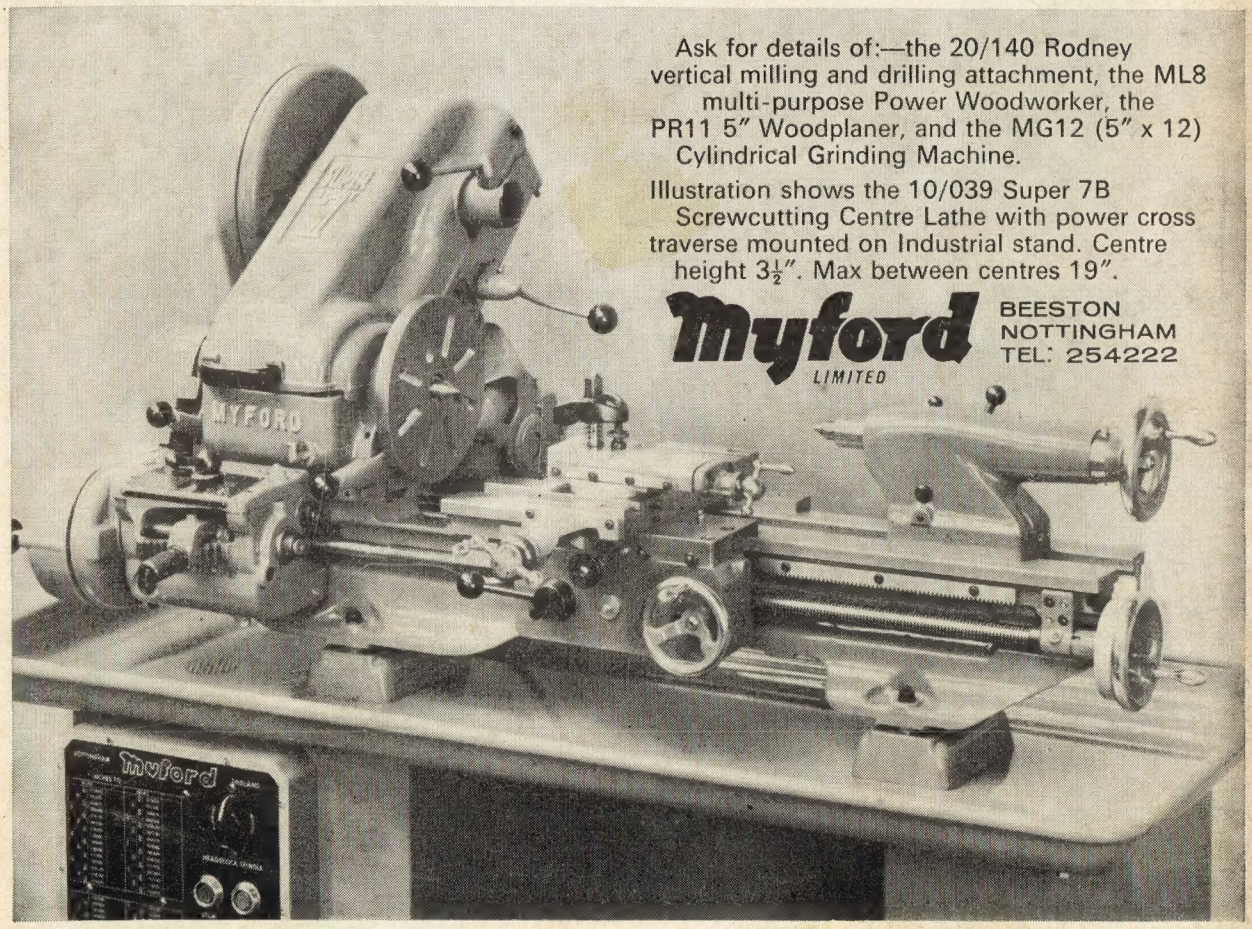

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